Career Pathways for the Aboriginal and Torres Strait Islander Health Workforce:

Secondary Data Workforce Report

the Lowitja Institute
Australia's National Institute for Aboriginal and Torres Strait Islander Health Research

BILA MUUJI
ABORIGINAL CORPORATION HEALTH SERVICE

ABORIGINAL MEDICAL SERVICES ALLIANCE NORTHERN TERRITORY
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This Secondary Data report was written in 2019 and published by the Lowitja Institute in 2020.

A series of component reports, including this report, were written at different points in time by different teams as part of a national two year-long Career Pathways Project (CPP), which was undertaken during 2018 and 2019 (please see **Appendix** 1 for further detail).

All the underlying reports and findings from each component were synthesised for inclusion in the following overarching report:

Authors: Career Pathways Project team

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Lastly and importantly, we would like to recognise and thank the Aboriginal and Torres Strait Islander people working in the health sector – managers and workers of all kinds, in both community-controlled and government service settings – whose collective contributions to health care are represented in this report.

Abbreviations

ANZSCO	Australian New Zealand Standard Classification of Occupations
ABS	Australian Bureau of Statistics
ACCHO/ S	Aboriginal Community Controlled Health Organisation / Service
AHPRA	Australian Health Practitioner Regulation Agency
AIHW	Australian Institute of Health and Welfare
AMSANT	Aboriginal Medical Services Alliance Northern Territory
ANZSIC	Australian and New Zealand Standard Industry Classification
AQF	Australian Qualifications Framework
DET	Department of Education and Training
DJASB	Department of Jobs and Small Business
HRIS	Human resources information system
HWD	Health Workforce Dataset
NCVER	National Centre for Vocational Education and Research
UNSW	University of New South Wales
VET	Vocational Education and Training

Cultural Preamble

The Career Pathways Project Team acknowledges the Traditional Owners of the land on which we walk and pay our respect to our Elders past, present and emerging. We gratefully acknowledge the generous contribution of Aboriginal and Torres Strait Islander workers and managers from Aboriginal Community Controlled Health Organisations and government health services. Without their valuable participation, this Project would not have been able to document the true value of the work they perform and the cultural knowledge they bring to the health and wellbeing of the Aboriginal and Torres Strait Islander community.

The Career Pathways Project Aboriginal Reference Group, comprising Aboriginal members of the research team, is mindful of the culture, heritage, and protocols of Aboriginal and Torres Strait Islander society and the role of our communities and Elders within this structure. This Project has endeavoured to bring together cultural models of engagement within the structure and process of research. Under the guidance of the Aboriginal Reference Group, the Project reflects a respectful process that is considerate and inclusive of the values and traditions of our communities and what we hold as Aboriginal researchers conducting research in our communities.

The project brings together the voices of Aboriginal and Torres Strait Islander people from across Australia working in health. It highlights the strengths in cultural knowledge, community connections, clinical practices and communication skills, and Indigenous peoples' distinctively Aboriginal and Torres Strait Islander commitment and ways of knowing and conducting business in delivering services to their communities.

The Project articulates an awareness of issues and barriers that frame the employment and retention of Aboriginal and Torres Strait Islander people. It recognises the importance of experience in connecting to Country, community, local knowledge, overlaid with industry expertise and personal and lived experiences that reflect community health and wellbeing.

The Project demonstrates the importance of strengthening and supporting Aboriginal and Torres Strait Islander leadership to create opportunities to enhance employment and retention to reinforce and to embed career pathways for our people in all sectors of health. It offers insights in addressing racism and other underlying attitudes such as unconscious bias and stereotyping, and in understanding of the impact of work overload and burnout, with the aim of creating culturally safe and responsive environments and practices that, in turn, will ensure the wellbeing of the Aboriginal and Torres Strait Islander health workforce, the non-Indigenous health workforce and community alike.

Yours in Unity,

Career Pathways Project Aboriginal Reference Group

Acknowledgement of Country

The project team for this report wishes to acknowledge the Traditional Owners of the lands we walked on and worked on in conducting this secondary data analysis. We pay our respects to their Elders – past, present and future.

Terminology

In this report the term Aboriginal and Torres Strait Islander people is used throughout, except where tables require abbreviation of terms.

About the artwork

Artwork by Joanne Nasir 2017. The Spirit People Dreaming from my great grandmother's songline, Borroloola.

Each figure represents a state or territory. The purple and blue lines represent the career pathway (purple) of the worker and their professional, personal and spiritual journey by the blue. The cream circles at the bottom of the figures represent the Stone Dreaming to keep Aboriginal and Torres Strait Islander workers strong, resilient and spiritually connected to their cultural identity.

Executive Summary

Data sets and data collection

The method for this component of the broader mixed methods study of Aboriginal and Torres Strait Islander Career Pathways consists exclusively of undertaking descriptive statistical analysis of existing data. The limitations of using secondary data sources, particularly when unit record data is not available for re-analysis, are acknowledged. Accordingly, specific inferences from the findings are limited, and the findings ultimately need to be considered in conjunction with the findings from other study components.

Five main sources of data were explored as follows:

- ABS Population Census data interrogated by Aboriginality, age, gender, occupational classification, industry classification and educational level
- Department of Employment, Education and Workplace Relations (DEEWR) data was used to provide an insight into the age and gender composition of the current Aboriginal and Torres Strait Islander student population and future entrants to health professions
- Data from the National Centre for Vocational Education Research (NCVER) includes relevant course enrolments and course outcomes (graduations) from VET level courses
- The Commonwealth Department of Health (Workforce Branch) holds data on of all the processed annual workforce surveys of registered professions
- Australian Institute of Health and Welfare (AIHW) holds data from an annual survey of Aboriginal community-controlled services receiving Commonwealth funding to deliver primary health care and other services. They are required to contribute to the Online Services Report (OSR) annually.

Current situation

In the last twenty years there has been impressive growth in the absolute number of Aboriginal and Torres Strait Islander people in the health workforce. The growth rates average 4.7% per annum. These are much higher workforce growth rates than the total general workforce population. Whilst only accounting for approximately 20% of the total Aboriginal and Torres Strait Islander health workforce, employment growth in ACCHSs for the last 10 years (AIHW, 2017a) has contributed significantly to total growth.

Despite the significant growth in the Aboriginal and Torres Strait Islander workforce, this analysis has revealed that there has been no real improvement in the Aboriginal and Torres Strait Islander proportion of the total health workforce (and especially as yet the health professional workforce). Of thirty five health occupations reviewed, only six occupations had an Aboriginal and Torres Strait Islander workforce proportion of the total workforce that was equal to or greater than 3% (equivalent with the total population proportion). Equally discouraging has been a lack of change in the proportion of Aboriginal and Torres Strait Islander workforce to the Aboriginal and Torres Strait Islander population.

The lack of change in the proportional representation of Aboriginal and Torres Strait Islanders in the total health workforce appears to be primarily due to an equally rapid growth in the non-Indigenous health workforce. The lack of change in the proportion of Aboriginal and Torres Strait Islander workforce per the Aboriginal and Torres Strait Islander population is attributed to a significant increase in the number of persons identifying as Aboriginal and Torres Strait Islander, against which Aboriginal and Torres Strait Islander health worker participation has only just kept pace.

Factors facilitating career development and advancement

There has been significant growth in enrolments in, and graduations from, health-related higher education and tertiary education courses. This growth in education activity has clearly helped fuel workforce growth in general, but particularly in certain health professions where the initial base number was very low (e.g. pharmacists, physiotherapists and medical imaging professionals).

The overall increases in the participation of Aboriginal and Torres Strait Islander workers in the health sector is helping potentially to create a "critical mass effect". This effect will assist in reducing the influence of culturally unsafe workplaces acting as a barrier to future aspirants wanting to enter health professions. The presence of greater numbers of Aboriginal and Torres Strait Islander workers in particular professions also provides a larger pool of appropriate mentors and career coaches to help newer entrants survive and prosper.

Policies and practices to nurture and optimise the value from these professional critical mass populations (through structured mentor programs, appropriate training and remuneration) will be important.

Factors impeding career development and advancement?

A disproportionate amount of recent Aboriginal and Torres Strait Islander workforce growth has been in low status and lower paying jobs (such as personal care workers). These jobs tend to have 'shorter' salary scale structures that terminate at comparatively low-end points with poor articulation to other roles particularly roles in professional careers.

The preponderance of Aboriginal and Torres Strait Islander workforce growth in occupations with poorer career progress prospects is strongly influenced by what sectors of the health industry in which employment is occurring. More employment growth has happened in residential care, personal care and some primary health care industry sectors where there are limited career progression opportunities, as opposed to employment in the hospital sector where career pathways, because of greater workforce sizes and more hierarchical organization structures, tend to be longer and provide greater career progression opportunities.

The workforce in these jobs nevertheless represents a potential population to be rapidly developed to assume health professional careers. They have existing health work competencies and health industry understanding and can have significant motivation to progress. Policies and practices to realise the potential of this population require going beyond local initiatives and require structures that cross individual organization boundaries to provide quality practice supervision, career coaching and access to education that is more than study leave.

Other influences

Opportunities for employment of Aboriginal and Torres Strait Islanders in the health workforce seems to vary by jurisdiction (some States have better employment outcomes), by the profession / occupation (several health professions seem to be doing better than most others), by sector in which employed (the Aboriginal Community Controlled sector is a greater employer of Aboriginal and Torres Strait Islanders compared with the Government or private sectors) and by location of employment (which compared to the non-Indigenous workforce favours rural and remote settings). These influences can be both positive or negative to career progress of Aboriginal and Torres Strait Islanders in the health workforce.

Introduction

This research is part of a broader project, the aim of which has been to provide insights and guidance to enhance the capacity of the health system to support the development and careers of Aboriginal and Torres Strait Islander people in the health workforce and so hopefully engender greater workforce retention. Further information on this project (titled the Career Pathway Project – CPP), its research questions and the component elements is provided at **Appendix 1**.

This report concerns only one component of the broader CPP – i.e. the analysis of available secondary data on the workforce. As such, it attempts to provide answers to the following three of the nine research questions:

- What factors facilitate Aboriginal health workforce career development and career advancement?
- What factors impede Aboriginal health workforce career development and career advancement?
- What is the influence of jurisdiction, sector, and discipline/profession on career progression, and what aspects of these influences are specific to the Aboriginal health workforce or the health workforce as a whole?

Purpose, scope and approach

The primary purposes for this research component relate to:

- Estimating the numbers of current Aboriginal and Torres Strait Islander health professionals (by jurisdiction and profession and other demographic characteristics if possible) as against non-Aboriginal and Torres Strait Islander health professionals
- Estimating the size and nature of the pool of Aboriginal and Torres Strait Islander workers currently in the health (or community services) workforce but not in health professions that could be part of career development into or within health professional pathways
- Describing the current distribution of the Aboriginal and Torres Strait Islander workforce in health, and therefore the relative level of change and possibly investment that would be required to achieve an alternative health professional workforce composition
- Establishing the current numbers of Aboriginal and Torres Strait Islander people in training (including for health professions) and some insight into the composition (age, gender, location) of that population.

Research Design and Methods

Data sets and data collection

The method consists exclusively of undertaking descriptive statistical analysis of existing data. Five main sources of data were explored – each source is described separately below in terms of the nature of the data and the main analysis approaches.

Population Census data

ABS Population Census data can be interrogated by Aboriginality, age, gender, occupational classification (Australian and New Zealand Standard Classification of Occupations [ANZSCO[1]]), industry classification (Australian and New Zealand Standard Industry Classification [ANZSIC]), highest educational level and location (probably at the statistical division level to allow some analysis below jurisdiction level).

Data collected through the 2016 Population Census has been comparatively recently released providing quite current data from which to make estimates. 2016 data can be compared with data from the 2011 and 2006 Census to observe any trends.

Higher Education statistics

Department of Employment, Education and Workplace Relations (DEEWR) – Data was obtained on Aboriginal and Torres Strait Islander people enrolled in or recently completed higher education courses in preparation to be a health professional[2]. This data was used to provide an insight into the age and gender composition of the current Aboriginal and Torres Strait Islander student population and future entrants to health professions. A history of recent past Aboriginal and Torres Strait Islander entrants to the health professions (at least graduations) was also obtained.

Vocational education statistics

Data from the National Centre for Vocational Education Research (NCVER) – Similar data to above can be extracted on enrolments and completions in VET sector courses (for instance the courses important to Aboriginal and Torres Strait Islander Health Practitioners such as for Aboriginal Health Practitioners, Indigenous Environmental Health Workers, aged care workers, mental health workers, therapy assistants, etc.). This data, which includes both relevant course enrolments and course outcomes (graduations), is often incomplete, and sometimes difficult to interpret since many enrolments do not proceed to course completion. However, the data was compared with Population Census data to improve understanding.

Registration Authority data

The Commonwealth Department of Health (Workforce Branch) – Data are now held by this Branch of all the processed annual workforce survey collections. Data can be sought on Aboriginal and Torres Strait Islander persons registered and working in any one of the 14 health profession registers listed in Table 1. Recently analysed data for some of these

[1] Relevant ANZSCO codes for working in a health occupation would include Sub Group 25 (Health Professions), sub-group 272 (Social Welfare), selected codes in Group 3 (trades and technicians) and in Group 4 (Community and Personal Service Workers). Other, non-health workers working in health services can be identified as working in ANZSIC code Q.

[2] Data can be extracted by specified 'Field of education'.

occupations was not available but the larger occupations (Medicine, Nursing) were comparatively up to date.

***Table 1:** Registered health professions*

Aboriginal and Torres Strait Islander Health Practice Chinese Medicine Chiropractic Dental Medical Medical Radiation Nursing and Midwifery	Occupational Therapy Optometry Osteopathy Pharmacy Physiotherapy Podiatry Psychology

Since 2011, all registration (and therefore annual workforce surveys undertaken in conjunction with registration renewal) has been within the control of AHPRA, and accordingly all registrants since that time have been allocated a unique identifier in the form of a registration number.

ACCHO Services data

Australian Institute of Health and Welfare (AIHW) – Aboriginal community-controlled services receiving Commonwealth funding to deliver primary health care, maternal and child health services, social and emotional well-being services and/or substance abuse services are required to contribute to the Online Services Report (OSR) annually. Approximately 95% of relevant services (275 services in 2015/16) provide data on a range of organizational issues such as client contacts and occasions of service, but importantly on staffing. This data is published annually[3].

Data analysis

Data was analysed primarily through descriptive statistics using frequency distributions and cross tabulations. Trend analyses were undertaken wherever the data permitted.

[3] AIHW (2017) Aboriginal & Torres Strait Islander health organisations: Online Services Report – key results 2015-16. Aboriginal & Torres Strait Islander health service report no. 8. Cat.no.IHW 180. Canberra

Current Situation

Numbers in the workforce

According to the 2016 Population Census, there were 26,188 Aboriginal or Torres Strait Islander people working[4] in the Australian health industry (Table 2). This represented 1.94% of the total health workforce whereas Aboriginal and Torres Strait Islanders make up 3.3% of the total population[5].

Table 2: *Distribution of the health industry workforce by industry sectors and Indigenous status*

Sub-sectors of the Health industry	Non-Indigenous	Aboriginal & Torres Strait Islander	Not Stated	Total
Hospitals	412,681	5,638	1,794	420,109
Medical and Other Health Care Services	373,543	6,097	1,614	381,252
Residential Care Services	223,214	4,329	1,399	228,943
Social Assistance Services[6]	287,150	9,181	1,597	297,928
Health Care and Social Assistance (nfd[7])	21,626	943	217	22,786
Total	1,318,210	26,188	6,627	1,351,018

Source: *ABS Population Census 2016*

Most Aboriginal and Torres Strait Islander workers in the health industry (59.3%) are performing a clinical-type function providing direct consumer care. This is across a full range of health occupations (see Table 3), although not all occupations / professions are equally well represented.

[4] ABS defines employed persons "at work", i.e. who worked in a [paid] job for at least one hour http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/6102.0.55.001~Feb%202018~Main%20Features~Employment~4

[5] The final estimated resident Aboriginal and Torres Strait Islander population of Australia as at 30 June 2016 was 798,400 people, or 3.3% of the total Australian population (ABS, 2018).

[6] 'Social Assistance Services' include a range of services that are more typically considered to be part of the non-health sector, particular child care services, disability services, adoption services, but also some services that might be included such as aged care assistance, drug and alcohol services, welfare counselling and youth welfare services.

[7] The terms 'nfd' or 'nec' are frequently employed in the reporting of statistics, especially from ABS. 'Nec' means 'not elsewhere classified'. It allows responses from a Census form which don't fit into a suitable category in the classification to still be included. 'Nfd' means 'not further defined'. This is used when a respondent has not provided adequate information for the response to be put into a category at the most detailed level.

***Table 3:** Distribution of the Aboriginal and Torres Strait Islander (ATSI) health workforce by type of health occupation (only clinical occupations included)*

Occupations	Numbers	% of Total ATSI workforce
Registered Nurses	2,359	15.8
Midwives	186	1.2
Nurse Managers and Nursing Clinical Directors	122	0.8
Nurse Educators and Researchers	26	0.2
Other Midwifery & nursing professionals	3	0.02
Enrolled and mothercraft nurses	614	4.1
Nursing support worker and personal care workers	1,592	10.7
Aged care & disability workers	2,876	19.3
Other types of care workers	182	1.2
Indigenous Health Workers	1,070	7.1
Generalist medical practitioners[8]	240	1.6
Specialist medical practitioners[9]	38	0.3
Other medical practitioners[10]	49	0.3
Pharmacists	46	0.3
Medical imaging professionals	60	0.4
Other health diagnostic & promotion	429	2.9
Ambulance officers and paramedics	281	1.9
Psychologists	85	0.6
Social Workers	464	3.1
Counsellors	350	2.3
Social professional	19	0.1
Welfare, Recreation & Community Arts Workers	775	5.2
Welfare Support Workers[11]	1,910	12.8
Physiotherapists	115	0.8

[8] This ANZSCO category includes general practitioners, resident medical officers and interns.
[9] Includes registrars
[10] In ANZSCO, this unit group covers Medical Practitioners not elsewhere classified. It includes Dermatologists, Emergency Medicine Specialists, Obstetricians and Gynaecologists, Ophthalmologists, Pathologists, Diagnostic and Interventional Radiologists, and Radiation Oncologists. Medical Registrars training in these specialties are included in this unit group. Effectively this group is the smaller medical specialist disciplines and those in training for these specialist areas.

[11] This includes workers in both the Health and Welfare industry sectors. Some of the workers (for example, Family Support Workers and Parole or Probation Officers) are not working in the health industry.

Occupations	Numbers	% of Total ATSI workforce
Nutritional professionals	20	0.1
Occupational therapists	39	0.3
Speech professionals and audiologists	31	0.2
Podiatrists	22	0.1
Optometrists & orthoptists	8	0.05
Diversional therapists	77	0.5
Dental practitioners	40	0.3
Dental hygienists, technicians and therapists	30	0.2
Dental assistants	344	2.3
Chiropractors & osteopaths	11	0.07
Complementary health therapists	25	0.2
Occupational and environmental health professionals	372	2.5
Total	14,910	

Source: *ABS Population Census, 2016*

For various reasons, the self-reported Population Census data is never considered completely accurate and most health workforce analysts believe that the Census data is likely to underestimate the true workforce size. By way of checking, it is possible to compare 2016 Census data with 2016 data from the registration authorities (Health Workforce Dataset, HWD) (see Table 4 below which shows the number of registrants working). There are considerable differences in the workforce size estimates from the two sources and these differences are difficult to reconcile.

The consensus of opinion amongst health workforce planners is that registration authority data should be more accurate since Population Census data relies on self-reported information. Based on registration authority workforce survey data, there were 5,253 Aboriginal and Torres Strait Islander workers active in the registered professions workforce in 2016.

***Table 4:** Comparison of workforce size estimates from Registration Authority annual survey and ABS Population Census data sources of Aboriginal people working in health professions*

Profession	HWD data	Population Census data
2016 data		
Medical practitioner	451	327
Nurses and midwives	3,600	2705
Dental practitioner	87	40
Aboriginal and Torres Strait Islander health practitioner	475	1,070[12]
Medical radiation practitioner	63	60
Psychologist	193	85
Pharmacist	82	46
Physiotherapist	142	115
Occupational therapist	65	39
Chiropractor	13	11
Podiatrist	44	22

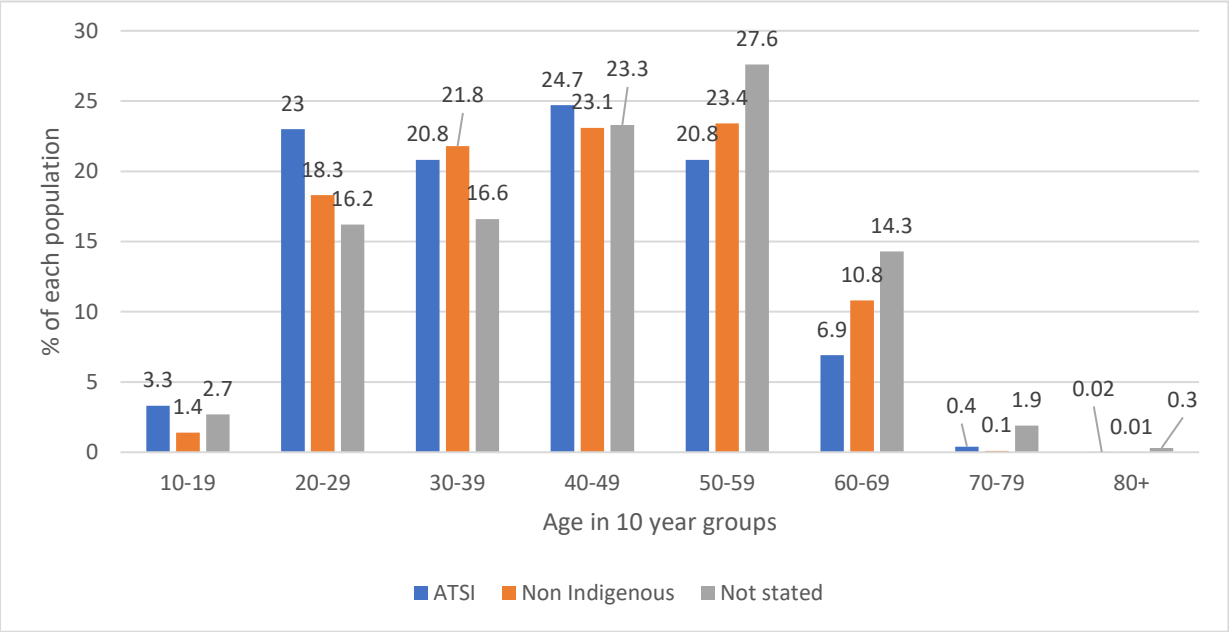
[12] Note that this table probably includes non-registered Aboriginal Health Workers.

Distribution by age & gender

The Aboriginal and Torres Strait Islander population working in the health workforce is slightly younger than the non-Indigenous proportion of the health workforce. Almost three quarters of the Aboriginal and Torres Strait Islander workforce (72%) is under 50 years of age, whereas 65% of the non-Indigenous workforce is under 50 years old (see Figure 1 for details).

The health workforce in general is known for its high degree of feminisation, with 78.5% of the employed workforce being female (ABS Population Census data, 2016). The Aboriginal and Torres Strait Islander segment of that workforce reflects this characteristic, with the female proportion of workers only being slightly lower at 77.8%.

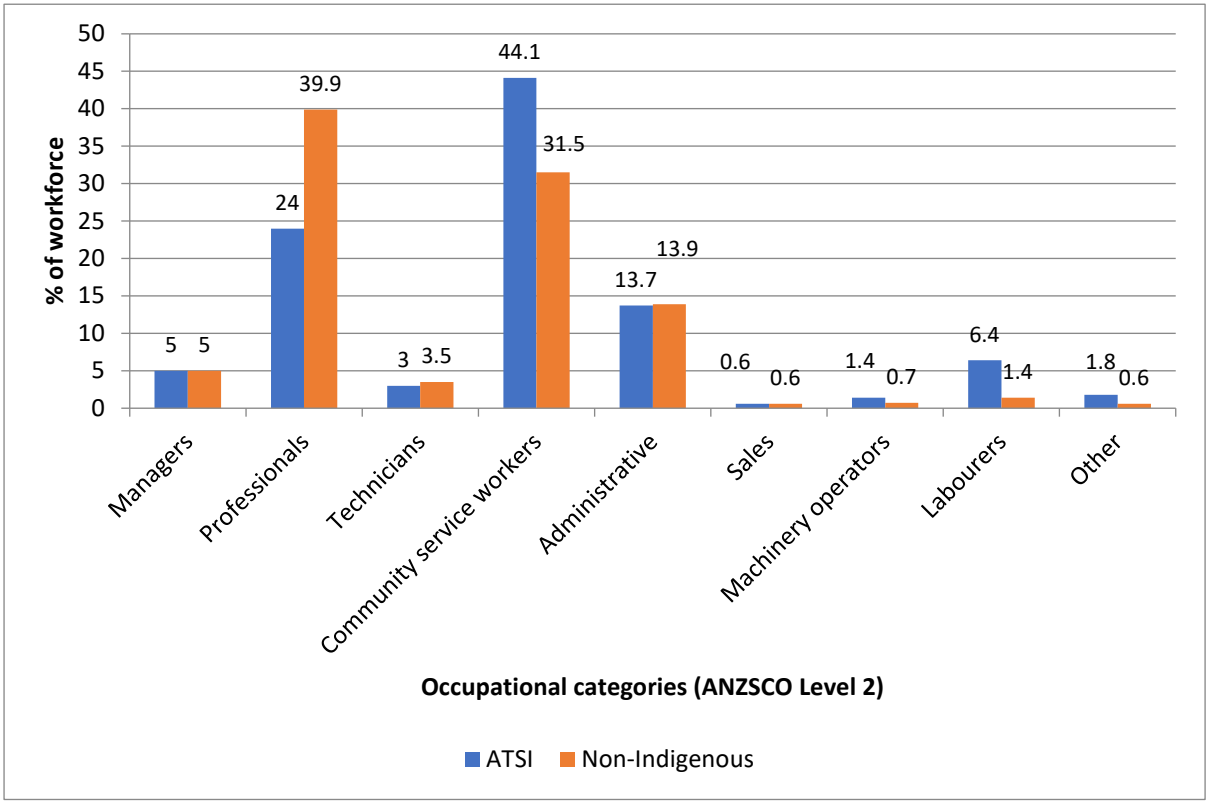
Figure 1: *Distribution of the Aboriginal & Torres Strait Islander health workforce by age compared to the non-Indigenous health workforce (Source: ABS Population Census 2016)*



Distribution between health occupations / professions

As well as being proportionately less in number than the non-Indigenous health workforce (when compared with the total population proportions), the Aboriginal and Torres Strait Islander health workforce is distributed differently. Across the entire health industry, the distribution of the Aboriginal and Torres Strait Islander and non-Indigenous workforces by broad occupational category (ANZSCO Code level 2) is shown in Figure 2.

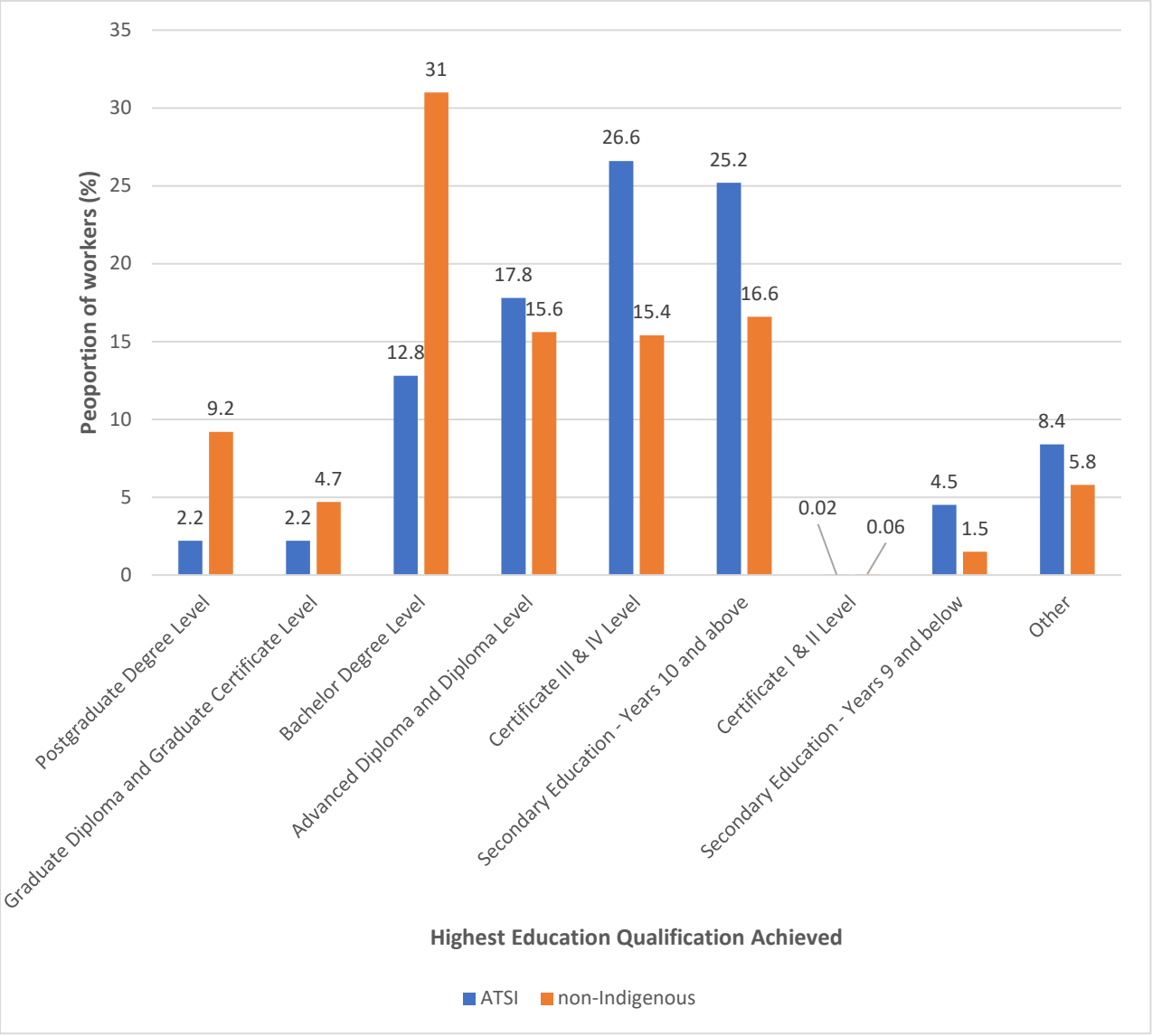
Figure 2: *Distribution of the health industry workforce by broad occupational category (ANZSCO 2 digit level) and Aboriginality status (Source: ABS Population Census, 2016)*



In general, the Aboriginal and Torres Strait Islander workforce is more highly represented in the lower skilled (and generally lower paid) occupational categories, but the differences are most evident in the Professionals category (where non-Indigenous workers outnumber Aboriginal and Torres Strait Islanders by almost two to one) and in the Community and Personal Service Workers category where the Aboriginal and Torres Strait Islander workforce is more prominent. Aboriginal health workers and practitioners also fall into the *Community and Personal Service Workers* ANZCO category.

The disproportionate distribution of Aboriginal and Torres Strait Islanders between occupational categories when compared with the non-Indigenous health workforce is possibly explained by the differences in highest level of qualification achieved (Figure 3).

Figure 3: *Distribution of the health industry workforce by highest level of qualification achieved and Aboriginality status (Source: ABS Population Census, 2016)*



Just under half (45%) of the non-Indigenous workforce possesses a bachelor degree level qualification or higher, while only 17% of Aboriginal and Torres Strait Islanders possess that level of qualification. A bachelor degree (Australian Qualifications Framework [AQF] level 7 or above[13]) is generally a prerequisite for entering a health professional career. The Aboriginal and Torres Strait Islander workforce though seemingly has a strong pool of certificate and diploma-level qualified workers that potentially could progress to bachelor's degree level qualifications with support. Investment in this population, who are already in the health workforce, and already have already acquired considerable levels of relevant competence, would seem to potentially offer better or at least equal returns than on undergraduate

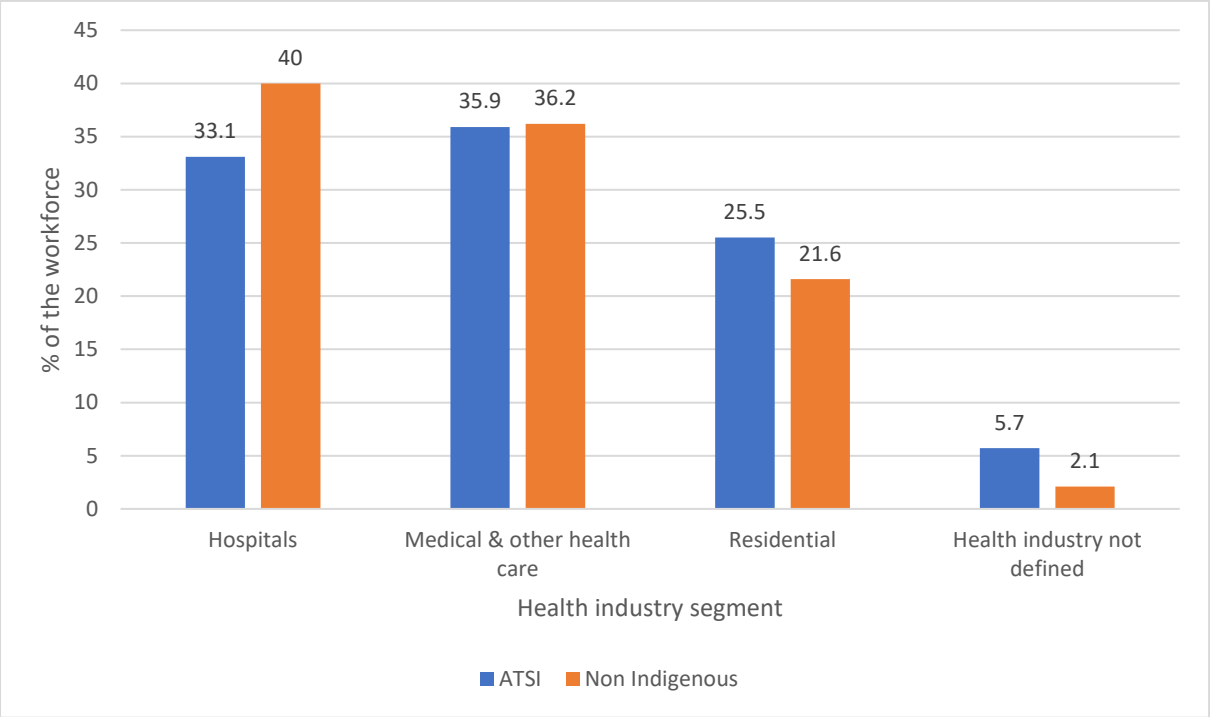
[13] https://www.aqf.edu.au/aqf-levels

education. This is not to suggest ignoring investment in graduate recruitment and support, but rather not to neglect the other area of investment opportunity to rapidly change the workforce composition.

Distribution between health industry sectors

The Aboriginal and Torres Strait Islander health workforce is distributed quite differently between the broad health industry segments when compared with the non-Indigenous workforce (see Figure 4). The differences are most notable with regard to hospitals (which account for 40% of total health industry employment), where non-Indigenous employment is proportionally much higher, and in relation to residential care services[14], where employment of Aboriginal and Torres Strait Islanders is proportionally much higher.

Figure 4: *Distribution of the health industry workforce by main sub-sector categories (ANZSIC Level 3) and by Indigenous status (Source: ABS Population Census, 2016)*



This is an important difference because, industrially (based on examination of award structures), careers in hospitals typically tend to benefit, at least for professionals, from longer career pathways and more opportunities to progress. Hospital based professional career pathways often simply benefit from larger scale, larger departments, more opportunity for hierarchy. On the other hand, residential care services are characterised by occupations with limited career progression (Senate Community Affairs Committee, 2017[15]), as are (to some

[14] Residential care refers to any care and services someone receives when they are living in a care facility. There are a number of types of residential care, but the most common type of residential care facility would be an aged care home (also called a nursing home). It could though also include a foster care home, a centre for people with drug and alcohol issues, or a residential mental health facility.

[15] The Senate Inquiry noted a lack of clear career paths and opportunities for professional development were cited by many submitters. One submission (JewishCare Victoria) observed …"*Career paths are not well defined or articulated for most aged care workers and there is an inconsistent approach within the industry for career and succession planning that feeds into a public perception of a 'dead end' career.*"

extent) some occupations in the medical and other health care services segment, which includes primary health care providers[16].There are also some interesting differences between genders within the Aboriginal and Torres Strait Islander workforce, with males being much more likely to have employment in the 'Medical and other health care' services segment than females (42.1% vs 34.1%) and much less likely to be working in the 'Residential care' services segment (17.7% vs 27.6%).

In Table 5 the differences are further explored at a more detailed industry segment level. Apart from the general hospital segment (38.5% non-Indigenous vs 30.2% Aboriginal and Torres Strait Islander), almost all the areas of professional services segments (e.g. pathology, physiotherapy, dental, optometry) are double or more the proportion of non-Indigenous when compared to the Aboriginal and Torres Strait Islander workforce.

Table 5: *Distribution of the health industry workforce by industry segments and Indigenous status*

Industry segment (ANZSIC level 4)	Indigenous Status	
	Non-Indigenous	Aboriginal & Torres Strait Islander
Hospitals (except Psychiatric Hospitals)	38.5	30.2
Psychiatric Hospitals	0.7	0.3
Medical and Other Health Care Services (undefi	1.5	4.0
General Practice Medical Services[17]	8.9	9.8
Specialist Medical Services	3.7	1.7
Pathology and Diagnostic Imaging Services	4.0	1.9
Dental Services	4.5	2.6
Optometry and Optical Dispensing	1.5	0.7
Physiotherapy Services	1.9	0.7
Chiropractic and Osteopathic Services	0.8	0.2
Other Allied Health Services	6.5	6.7
Ambulance Services	1.6	1.7
Aged Care Residential Services	19.8	20.5
Other Residential Care Services	1.6	6.3
Social Assistance Services	1.9	7.3
Health Care & Social Assistance (undefined)	2.0	5.1

Source: *ABS Population Census, 2016*

[16] Note, in this instance we are not talking about progress within an organization, but rather within a profession.

[17] Includes Aboriginal Community Controlled sector primary health care services

Again, industry segments with shallow career paths (a) because the organisations are small and cannot accommodate any significant career or salary progression (e.g. dental services, many primary care services[18]) or (b) salary structures are very flat (e.g. residential care and social assistance services), are over-represented within the Aboriginal and Torres Strait Islander workforce. This can be compounded when there is poor articulation (without significant re-training) between lower and higher paid occupations within an organisation.

Comparative workforce supply

Worker to population ratios

Based on latest available data from Registration Authority workforce sources (mostly 2014 and 2015 for medical practitioners and nurses / midwives), there is a significant discrepancy between the relative supply of Aboriginal and Torres Strait Islander and non-Indigenous health professionals (see Table 6).

Table 6: *Comparison of the relative supply of selected health professions (per 100,000 head of population) by Indigenous status*

Health profession	Total rate employed per 100,000 population	
	ATSI workforce	Non-Indigenous workforce
Medical practitioner	56.1	352.6
Nurses and midwives	437.1	1,294.6
Dental practitioner	9.9	75.4
Total allied health professionals[(e)]	112.2	462.0
Aboriginal and Torres Strait Islander health practitioner[(f)]	36.5	. .
Medical radiation practitioner	7.3	50.5
Psychologist	18.7	99.9
Pharmacist	9.9	92.7
Physiotherapist	15.0	90.2
Occupational therapist	7.4	56.6
Chiropractor	2.2	17.7
Podiatrist	9.6	15.5
Osteopath	1.4	7.0
Chinese medicine practitioner	3.6	15.3
All registered health professions[(e)]	613.3	2,180.6

Source: *National Health Workforce Data Set (AIHW, 2017)*

[18] Some larger Aboriginal Community Controlled Health Services can be an exception to this generalisation.

Table 6 above:

a) includes all persons employed in the workforce for each profession, either in a clinical or non-clinical role.
b) rate is based on population of the same characteristic so may be understood as a participation rate (per 100,000 population). The Aboriginal and Torres Strait Islander population was estimated as 729,055. Non-Indigenous population estimated as 23,895,000.

The difference in supply between the two types of workforce can range from three times the supply for nurses (non-Indigenous vs Aboriginal and Torres Strait Islander workforce) to nine times the supply (e.g. pharmacists).

Differences between health professions

It was estimated at the 2016 Population Census (Census: Aboriginal and Torres Strait Islander population, ABS, 27 June 2017) that just on 3% of the total Australian population was Aboriginal or Torres Strait Islander. Accordingly, to be proportionately represented in the health workforce, at least 3% of the workforce need to be Aboriginal or Torres Strait Islander, but only 6 of 35 health occupations (leaving out the Indigenous Health Worker occupations) fulfill this requirement (see Table 7 - the heavy line delineates the top six occupations). Three of these six occupations comprise non-professional workforces and in total these six occupations account for just over 5% of the total workforce.

Table 7: *Proportion (%) of Aboriginal and Torres Strait Islander health workers in the workforce by type of health occupation*

Selected Health Occupations	ATSI Workforce	Non-Indigenous Workforce
Indigenous Health Workers	94.4	5.6
Other health diagnostic & promotion	7.5	92.5
Welfare, recreation & community arts workers	6.6	93.4
Welfare support workers[19]	6.2	93.8
Other types of care workers	4.7	95.3
Counsellors	4.2	95.8
Social Workers	3.0	97.0
Aged care & disability workers	2.5	97.5
Ambulance officers and paramedics	2.1	97.9
Nursing support worker and personal c workers	2.0	98.0
Social professional	2.0	98.0

[19] This includes workers in both the Health and Welfare industry sectors. Some of the workers, for example Family Support Workers and Parole or Probation Officers are not working in the health industry.

Selected Health Occupations	ATSI Workforce	Non-Indigenous Workforce
Enrolled and mothercraft nurses	1.9	98.1
Occupational and environmental health professionals	1.9	98.1
Diversional therapists	1.8	98.2
Dental assistants	1.6	98.4
Registered nurses	1.1	98.9
Midwives	1.0	99.0
Other midwifery & nursing professionals	1.0	99.0
Nurse managers and nursing clinical directors	0.8	99.2
Dental hygienists, technicians and therapists	0.7	99.3
Physiotherapists	0.6	99.4
Podiatrists	0.6	99.4
Nurse educators and researchers	0.5	99.5
Psychologists	0.5	99.5
Generalist medical practitioners	0.4	99.6
Other medical practitioners	0.4	99.6
Medical imaging professionals	0.4	99.6
Nutritional professionals	0.4	99.6
Complementary health therapists	0.4	99.6
Occupational therapists	0.3	99.7
Speech professionals and audiologists	0.3	99.7
Dental practitioners	0.3	99.7
Chiropractors & osteopaths	0.2	99.8
Specialist medical practitioners	0.2	99.8
Pharmacists	0.2	99.8
Optometrists & orthoptists	0.2	99.8

Source: *ABS Population Census, 2016*

In other occupations where Aboriginal and Torres Strait Islanders have a strong (if not proportional) representation (such as aged care & disability workers, nursing support workers and personal care workers, enrolled and mothercraft nurses, or dental assistants), the occupations tend to be para-professional and offer limited career progression opportunity within the occupation (O'Keeffe, 2017).

For instance, the Aged Care Award[20] (see below) has only seven levels of career progression with the salary structure affording only a 21% increase in remuneration between the lowest and highest levels:

Aged care employee level 1: $764.70

Aged care employee level 2: $796.30

Aged care employee level 3: $827.60

Aged care employee level 4: $837.40

Aged care employee level 5: $865.70

Aged care employee level 6: $912.40

Aged care employee level 7: $928.80

A large list of health professions with important consumer contact clinical roles have an Aboriginal and Torres Strait Islander proportion of the total workforce of less than 1%.

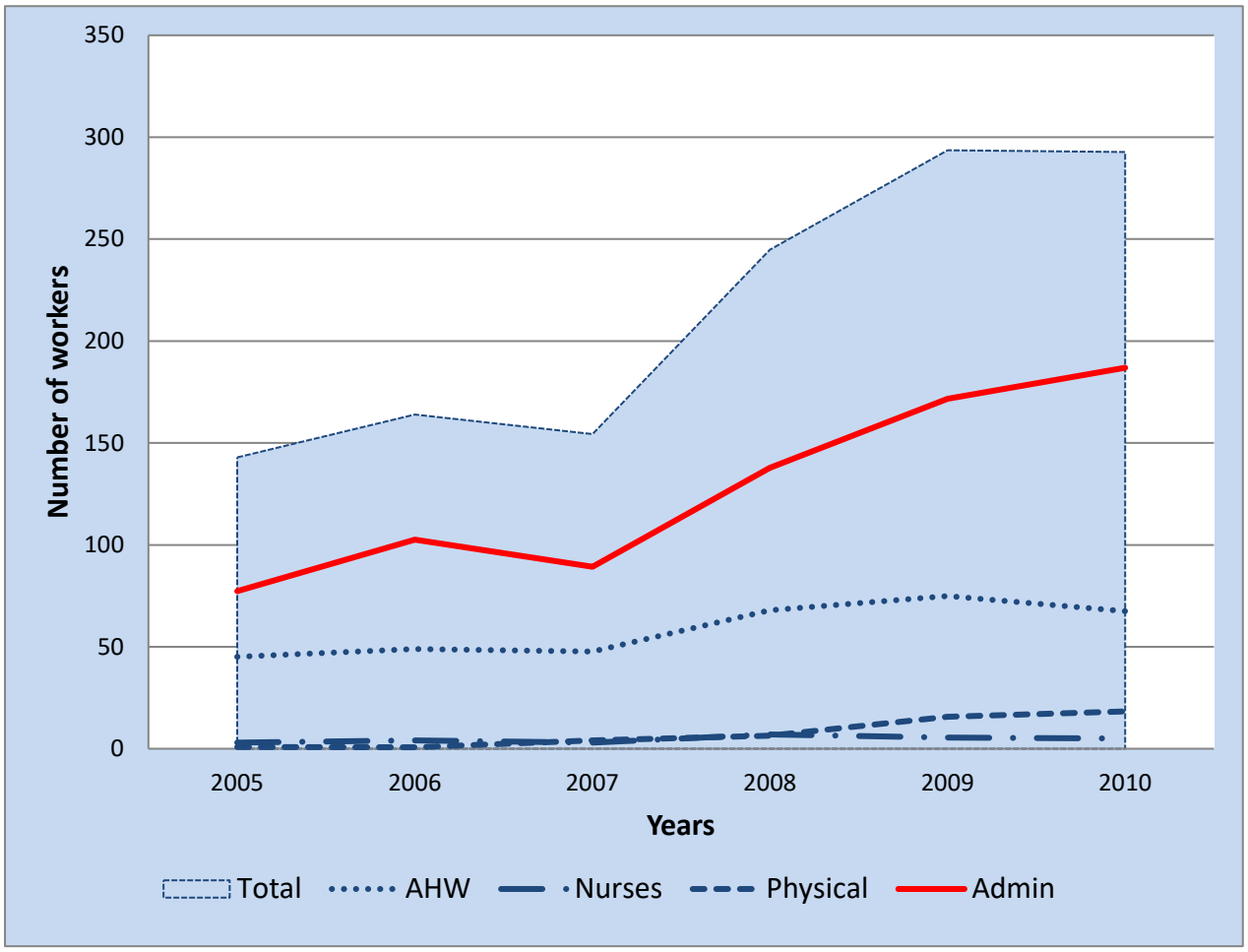
Distribution between pay rates

As well as Aboriginal and Torres Strait Islanders being over-represented in health occupations that have poorer career progression opportunities, these occupations also tend to be much more poorly paid. A multi-country study of 16 health occupations (Tijdens et al., 2013) found that personal care workers on average received only 30% of the income of a medical practitioner, health associates (e.g. enrolled nurses) 40% and community health workers 44%. In Australia, O'Keefe (2017) noted that residential aged care workers "are some of the lowest-paid workers in Australia". Poorer rates of pay not only affect the individual worker but can impact whole families dependent on the health worker's income.

Another perspective on the distribution of populations between relative pay can be obtained from a study by Ridoutt & Pilbeam (2011). That report showed that positive efforts by the health authority in the NT to increase the employment of Aboriginal people in the health sector were somewhat successful but were achieved only by increasing employment in lower paid administrative and ancillary positions.

[20] Pay Guide - Aged Care Award 2010 [MA000018] Published 28 June 2018

Figure 5: *Growth in number (FTE) of health workers employed by the Northern Territory Department of Health & Families who identify as Aboriginal or Torres Strait Islander, 2005-10*



Source: *DH&F, NT, 2010*

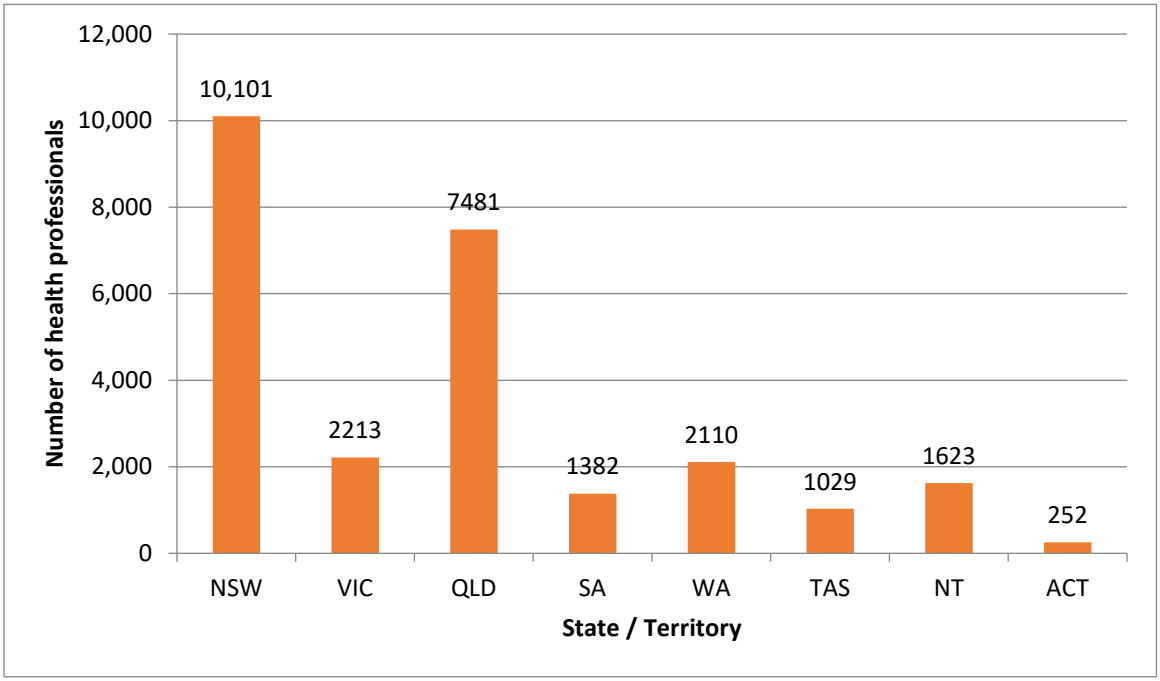
AHMAC (2017) made a similar observation in its health performance framework i.e. that access for Aboriginal and Torres Strait Islander people to a broad range of health service settings and occupations is needed to avoid under-representation in better remunerated, more skilled and managerial positions.

Factors Impacting Upon the Workforce

Jurisdiction influence

Of the over 26,000 in total Aboriginal and Torres Strait Islanders employed in the health industry, just over two thirds (67.1%) are employed in NSW and Queensland (see Figure 6).

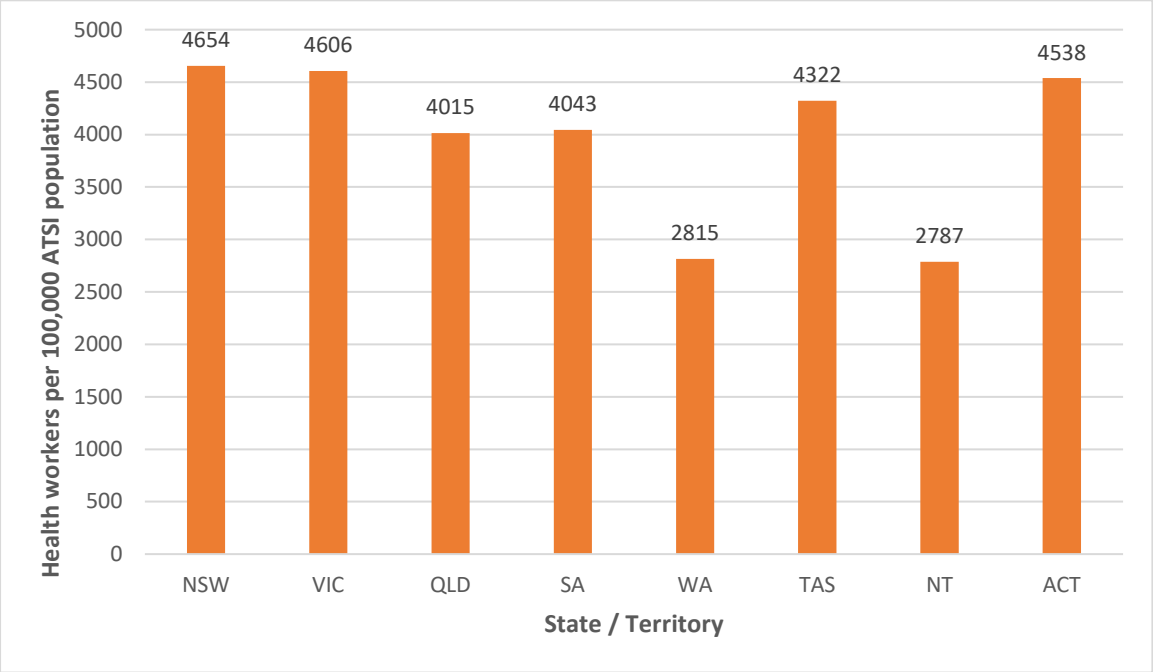
Figure 6: *Distribution of the Aboriginal and/or Torres Strait Islander workforce in the health industry by jurisdiction of workplace*



Source: *ABS Population Census, 2016*

Proportionately (per head of the Aboriginal and Torres Strait Islander population in each jurisdiction), NSW has the highest employment rate in the health industry (4,654 health workers per 100,000 of the Aboriginal and Torres Strait Islander population in that State), but several other States and Territories are relatively similar in proportional levels of employment (Victoria, ACT, Tasmania) (see Figure 7). Northern Territory has the lowest proportional level of employment of workers in the health industry (2,787 health workers per 100,000 of the Aboriginal and Torres Strait Islander population in that jurisdiction) but the situation in Western Australia is quite similar.

Figure 7: *Proportional distribution of the Aboriginal and/or Torres Strait Islander workforce in the health industry (per 100,000 head of population) by jurisdiction of work place to the Aboriginal and/or Torres Strait Islander population in each jurisdiction*



Source: *ABS Population Census, 2016*

The distribution of Aboriginal and Torres Strait Islander health professionals is similarly distributed (see Table 8) although some States and Territories (Victoria, South Australia, Tasmania and the ACT) have a greater proportional number of health professionals within their Aboriginal and Torres Strait Islander workforce.

***Table 8:** Number of Aboriginal and Torres Strait Islander health workers in the workforce by type of health profession*

Health profession	Jurisdiction							
	NSW	VIC	QLD	WA	SA	TAS	ACT	NT
Medical practitioners	154	70	115	45	34	7	13	13
Nurses and midwives	1311	453	947	262	217	272	43	95
Dental practitioners	30	10	24	8	8	7	0	0
Aboriginal and Torres Strait Islander health practitioners	87	7	93	81	41	3	3	160
Medical radiation practitioners	31	5	18	0	3	3	0	3
Psychologists	68	41	43	15	13	4	3	6
Pharmacists	35	14	18	9	3	3	0	0
Physiotherapists	63	16	29	13	7	7	3	4
Occupational therapists	24	8	18	9	6	0	0	0
Chiropractors	3	7	0	3	0	0	0	0
Podiatrists	19	9	3	1	3	6	0	3
Osteopaths	5	4	4	0	0	0	0	3
Chinese medicine practitioners	10	6	3	0	0	0	0	3
Total numbers	1840	650	1315	446	335	312	65	290
Proportion of total health professionals (n=5253)	35.0	12.4	25.0	8.5	6.4	5.9	1.2	5.5

***Source:** National Health Workforce Data Set (AIHW, 2018)*

Sector influence - Government vs ACCHO

There is no data source that allows a simple enumeration of the Aboriginal and Torres Strait Islander health workforce in terms of a comparative distribution between government, community controlled and other not-for-profit employers, and private health services.

In an analysis of the Aboriginal Community-Controlled health services (ACCHS) sector based on data from the Online Service Report (OSR) data collection, the AIHW (2017) identified 7,766 FTE staff working in such services, of which just over half (53%) were Aboriginal or Torres Strait Islander people. This is likely to translate into approximately 4842 workers[21] which, given the services' response rate to the survey underestimates the true number by at least 7%, could be more like 4,990.

This estimated figure comprises approximately 19% of all Aboriginal and Torres Strait Islander workers employed in the health industry. The AIHW (2017) also estimated that almost half (49%) of the total Aboriginal and Torres Strait Islander population during 2015-16 had been a client of a community controlled health service.

[21] Assuming a FTE conversion rate of 0.85. Note this figure includes all occupations employed including administrative and other non-clinical staff.

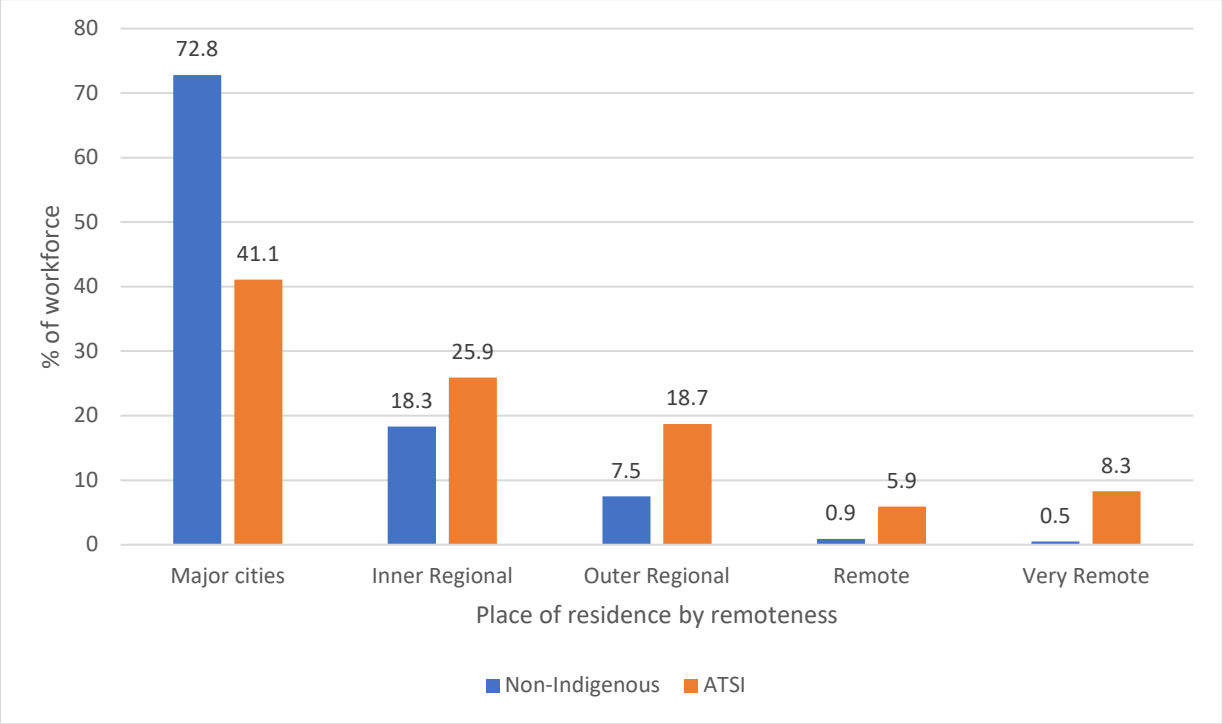
Health staff (i.e. workers who have a clinical or therapeutic relationship with clients) accounted for 57% of total ACCHS service staffing, although this varied between States and Territories from a low of 54% (Victoria) to a high of 61% (NSW). The other types of staff included managers, administrative officers, drivers, cleaning and security staff and Information Technology officers. The ratio of clinical to non-clinical staff in ACCHS services compares similarly with the whole workforce (59% of the workforce in 'health' roles).

Just like the broader health workforce, Aboriginal and Torres Strait Islander workers in the ACCHS services are less well represented in higher status and better paid health professions. For instance, whilst 53% of total staff in the sector are Aboriginal and Torres Strait Islander workers, only 7% and 12% respectively are doctors or nurses. This still compares favourably, though, with other health service settings where the proportion of doctors is half a percent and nurses one percent. A high proportion of the health promotion workers (71%), special interest support workers (74%) and outreach workers (87%) are Aboriginal and Torres Strait Islander.

Location influence - Urban vs Rural

The Aboriginal and Torres Strait Islander workforce is more evenly distributed than the rest of the health industry workforce in outer regional and remote locations, with more than three times the deployment (proportionately) of Aboriginal and Torres Strait Islander health workforce than the non-Indigenous workforce (see Figure 8). Almost one third of the Aboriginal and Torres Strait Islander health workforce is located in a rural, remote or very remote area. The most striking contrast between the Aboriginal and Torres Strait Islander and non-Indigenous workforce is in regard to location in very remote areas where nearly 10% of the former live and work in such areas as compared to 0.5% for the non-Indigenous workforce.

Figure 8: *Comparison of Aboriginal and Torres Strait Islander and non-Indigenous health workforces by distribution of workforce across areas of remoteness*



Source: *ABS Population Census, 2016*

The geographic distribution of the Aboriginal and Torres Strait Islander health **workforce** overall mirrors closely the geographic residential distribution of the Aboriginal and Torres Strait Islander **population.** This is particularly noticeable in in remote and very remote areas where, unlike for the non-Indigenous population, the proportion of the Aboriginal and Torres Strait Islander workforce in these regions is only slightly lower than that of the population.

In terms of its geographic distribution, the distribution of the ACCHS workforce is even more at odds with the rest of the health workforce, with 26% employed in Very Remote areas, and a further 42% employed in Remote and Outer Regional areas (AIHW, 2017). Only 13% of the ACCHS workforce is employed in Major City areas. Consequently, the above distribution of the ACCHS workforce means the ratio of Aboriginal and Torres Strait Islander health workforce FTE to Aboriginal and Torres Strait Islander clients is higher in remote and very remote areas (that is, when compared to the local or catchment population) than in major cities and regional areas.

From an employment perspective, an Aboriginal and Torres Strait Islander is more likely to gain employment in a rural or remote geographic. Arguably though, and except in the cases of the larger ACCHO services, employment in these areas, especially the more remote, are challenging to career progression because (a) there are fewer available positions to which progression is possible and (b) there is likely to be poorer potential access to education that would advance qualifications. Paradoxically then, Aboriginal and Torres Strait Islanders may need to migrate from remote and sometimes even rural areas to seek career advancement but, in doing so, this potentially takes them away from Aboriginal and Torres Strait Islander population concentrations (which in most cases is the population they wish to serve – Ridoutt

& Pilbeam, 2011). The extent to which this is true will vary between States and Territories as indicated in Table 9.

Table 9: *Proportional (%) distribution of the Aboriginal and Torres Strait Islander population by State & Territory residence and level of remoteness by state or territory*

State / Territory	Urban	Regional*	Remote**
Australian Capital Territory	99.5	–	–
New South Wales	46.4	49.8	3.5
Northern Territory***	–	20.5	78.2
Queensland	33.8	48.7	17
South Australia	51.9	32.7	14.6
Tasmania***	–	96.9	2.9
Victoria	51.8	47.5	0.1
Western Australia	39.8	21.4	38

* Includes inner and outer regional areas. ** Includes remote and very remote areas. *** Darwin and Hobart are classified as regional areas.

Source: *ABS Census of Population and Housing, 2016*

Are Things Changing?

Changes in absolute numbers

ABS Population Census data indicates an increase in the total number of Aboriginal and Torres Strait Islander people in the health workforce over every Census period since 1996. Table 10 below shows the increase in the workforce from 1996 to 2016 in selected health-related occupations.

Table 10 highlights that the number of Aboriginal and Torres Strait Islanders working in the majority of health professions increased substantially between 2011 and 2016, and very substantially between 1996 and 2016. Some of the smaller professions (i.e. those off a low base) have enjoyed up to an eight-fold increase in workforce numbers and even the nurse and medical practitioner professions have doubled or even tripled in size. Overall, the Aboriginal and Torres Strait Islander health workforce grew at a compound rate of 3.6% per annum. The total health workforce (allowing for variation in occupations) has grown at about 3% or slightly less per annum in the last five years.

Growth has been lowest in a number of potentially important allied health professions and para-professions for instance dietetics / nutrition, occupational therapy, optometry and dental care. This is likely to be especially impactful with regard to the availability of access to health care support required by those with a chronic illness, a client group where Aboriginal and Torres Strait Islander people are also likely to be over-represented (AIHW, 2016).

Table 10: *Trends in growth of the Aboriginal and Torres Strait Islander worker population over the years 1996 to 2016 by health occupation*

Health Occupations	Census years					Difference (2016-1996)	Percentage change 1996-2016
	1996	2001	2006	2011	2016		
Registered nurses	640	832	1,104	1,709	2,197	1,557	243.3
Enrolled and mothercraft nurses	564	202	216	287	1,118	554	95.7
Nursing support worker an personal care workers	579	808	984	1,438	1,445	866	149.6
Midwives	27	40	50	70	186	159	589.9
Nurse managers and nursing clinical directors	20	38	54	81	115	95	475.0
Nurse educators and researchers	7	11	17	21	29	22	314.3
Indigenous health workers	667	853	965	1,255	1,070	403	60.4
Generalist medical practitioners	41	57	80	129	207	166	404.9
Pharmacists	6	10	11	28	51	45	750.0
Medical imaging professionals	7	14	20	20	68	61	871.4
Ambulance officers and paramedics	49	83	153	216	281	232	473.5
Psychologists	13	19	43	85	84	71	546.2
Social workers	113	166	269	462	461	348	307.9
Physiotherapists	16	29	54	78	115	99	618.8
Dietitians	n.p.	18	7	25	22	4	22.2
Occupational therapists	n.p.	n.p.	13	23	42	29	223.1
Speech professionals and audiologists	7	10	17	18	31	24	342.9
Podiatrists	6	8	7	5	24	18	300.0
Optometrists	n.p.	n.p.	8	5	13	5	62.5
Dental practitioners	12	13	18	23	41	29	241.7
Dental hygienists, technicians and therapists	18	17	15	30	30	12	66.7
Dental assistants	117	125	171	266	319	202	55.56%
Totals	**4905**	**5354**	**6282**	**8285**	**9965**	**5001**	**98.1**

Source: *ABS Population Census, 2016*

Changes as a proportion of the total workforce

Despite the overall growth in numbers outlined above, there is still under-representation of Aboriginal and Torres Strait Islander people in key elements of the Australian health workforce (refer to Table 6). Aboriginal and Torres Strait Islander people are, for example, clearly under-represented in key professions such as nursing, medical practice and allied health professions.

Part of the explanation for this is that, although there have been efforts in recent years from both Commonwealth and state/territory governments to increase the size of the Aboriginal and Torres Strait Islander health workforce, there has also been an increase in the number of people identifying as Aboriginal and Torres Strait Islanders in the 2011 and 2016 Census. Another part of the explanation is that, in general, the community services and health sector of the Australian workforce is one of the fastest growing workforces within the Australian labour market (DJASB, 2018). It appears that some professions could clearly benefit from greater promotion of their occupation to enthuse Aboriginal and Torres Strait Islanders about pursuing appropriate courses of study that would result in entry to those professions[22].

Projected changes from the education situation

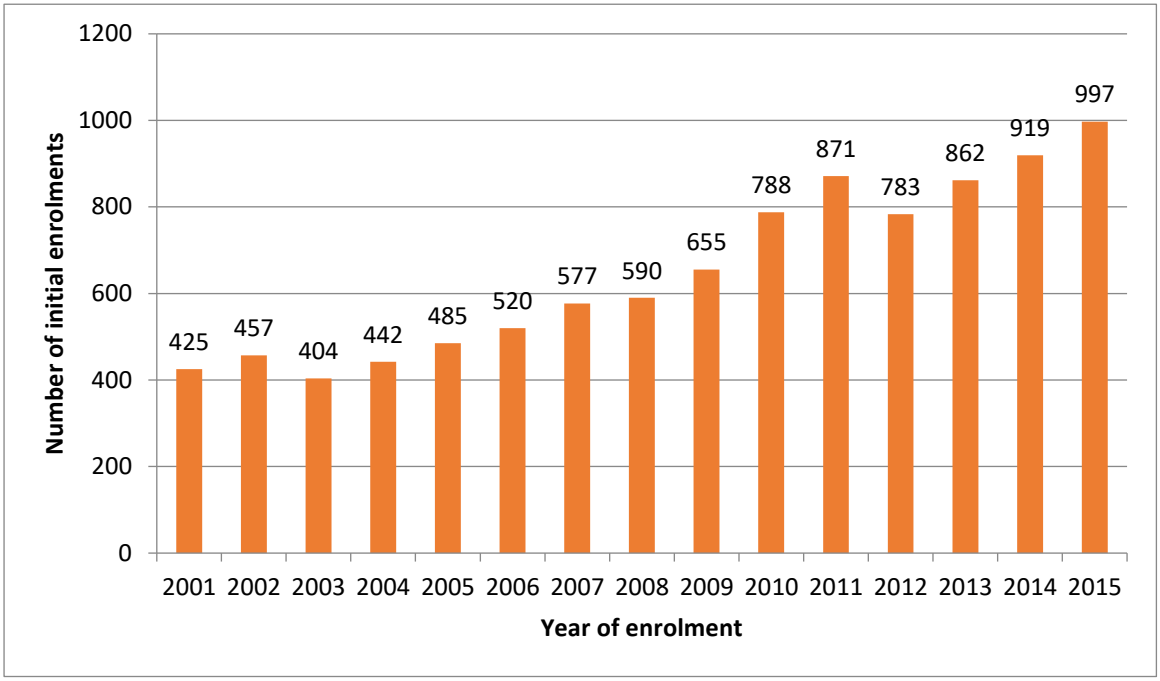
Since 2001, there has also been a significant increase in the number of Aboriginal and Torres Strait Islander people studying health-related disciplines that mirrors the growth of workforce numbers. Between 2001 and 2015 (see Figure 9), there has been a 135% increase in new commencement enrolments in health-related higher education courses.
This includes medical studies, nursing, pharmacy, dental studies, optical science, public health, radiography and rehabilitation therapies but excludes veterinary science, complementary therapies and other health courses under the broader field of health. It also does not include enabling and non-award courses.

The compound annual growth rate for change in enrolments is a fairly significant 5.85%, which is much greater in fact than the growth rate of the Aboriginal and Torres Strait Islander workforce over roughly the same time period, which was between 3.5% and 4%. In 2016 the new commencements rose again to 1,592, representing a further 60% increase.

The number of Aboriginal and Torres Strait Islander graduates from higher education health courses has also seen significant growth, going from 181 in 2001 to 416 in 2015 - a 130% increase. The most common health-related course for Aboriginal and Torres Strait Islander undergraduate students over this time has been nursing (AIHW, 2017b). Of all the health-related professions, the participation rates in rehabilitation therapies, dental, pharmacy, radiology and optical studies were the lowest.

[22] Evidence for this statement to be explored though qualitative data collection and analysis.

Figure 9: *Number of Aboriginal & Torres Strait Islander commencing enrolments in Health courses in higher education institutions, 2001-2015*



Source: *AIHW analysis of selected higher education statistics from Department of Education.*

Growth in Aboriginal and Torres Strait Islander enrolments and graduations has not occurred in isolation — there has been a similar expansion in the participation of the non-Indigenous population also in higher education. However, the rate of growth of Aboriginal and Torres Strait Islander participation has been slightly greater (new commencements 134% vs 128%; graduations 130% vs 103% comparing Indigenous and non-Indigenous rates respectively) which translates into a small (but significant $p<0.05$) increase in the proportion of Aboriginal and Torres Strait Islander graduates in the total health course graduations (from 1.1% to 1.2%). Current figures show that there are over 4,000 Aboriginal and Torres Strait Islander students enrolled in higher education health related courses.

Discussion

In the last twenty years, and the last ten in particular, there has been impressive growth in the absolute number of Aboriginal and Torres Strait Islander people in the health workforce. The growth rates per annum are between 2.5% and over 30% for some smaller occupations and an average of 4.7% per annum. These are much higher workforce growth rates than the total general workforce population. Whilst only accounting for approximately 20% of the total Aboriginal and Torres Strait Islander health workforce, employment growth in ACCHSs for the last 10 years (AIHW, 2017a) has contributed significantly to total growth.

Almost parallel to this phenomenon of workforce growth has been an equally significant growth in enrolments in and graduations from health-related higher education and tertiary education courses. This parallel growth in education activity has clearly helped fuel workforce growth, particularly in certain health professions where the initial base number was very low (e.g. pharmacists, physiotherapists and medical imaging professionals).

However, despite the significant growth in the Aboriginal and Torres Strait Islander workforce, this analysis has revealed that there has been no real improvement in the Aboriginal and Torres Strait Islander proportion of the total health workforce (and especially as yet the health professional workforce). Of the thirty five health occupations reviewed (and leaving out Indigenous Health Workers), only six occupations had an Aboriginal and Torres Strait Islander workforce proportion of the total that was equal to or greater than 3% (equivalent with the total population proportion). The proportion for most (including medical practice and nursing) ranged between 0.5% and 1.5% of the total workforce and, of the six with a higher proportion, only one (social work) was a health profession. The remaining occupations in that group were para-professions.

In spite of significant absolute growth, the lack of change in the proportional representation of Aboriginal and Torres Strait Islanders in the health workforce appears to be primarily due to equally rapid growth in total health workforce. Growth in the Aboriginal and Torres Strait Islander workforce is only just keeping pace with, or going only marginally ahead of, the total health workforce. Equally discouraging has been a lack of change in the proportion of Aboriginal and Torres Strait Islander workforce to the Aboriginal and Torres Strait Islander population. This outcome has been attributed to a significant increase in the number of persons identifying as Aboriginal and Torres Strait Islander, against which Aboriginal and Torres Strait Islander health worker participation has just kept pace. The health workforce proportion of Aboriginal and Torres Strait Islander people as compared to their representation in the total population (estimated at around 3% currently) currently remains out of reach.

Of direct interest for research into career pathways of Aboriginal and Torres Strait Islander in the health sector is the finding that a disproportionate amount of recent workforce growth has been in low status and lower paying jobs (such as personal care workers). These workers have pay scales and promotion prospects that are intrinsically limited by the roles in which they are employed and tend to have 'shorter' salary scale structures (an immediate determinant of career paths) that terminate at comparatively low-end points with poor articulation to other roles particularly roles in professional careers.

The preponderance of Aboriginal and Torres Strait Islander workforce growth in occupations with poorer career progress prospects is strongly influenced by what sectors of the health industry in which employment is occurring. More employment growth has happened in

residential care, personal care and some primary health care industry sectors where there are limited career progression opportunities, as opposed to employment in the hospital sector where careers pathways tend to be longer and provide greater career progression opportunities, including horizontal career movements.

As noted above, there is an increasing number of Aboriginal and Torres Strait Islander workers with relevant qualifications for work in the health services, but those qualifications are still mostly certificate level. Proportionately, significantly fewer Aboriginal and Torres Strait Islander workers hold bachelor degrees - a qualification level that is highly correlated to participation in professional occupations. Higher education qualifications have been shown to significantly enhance job prospects for young Australians (Lamb and McKenzie, 2001) and lead to higher salary and long-term promotion prospects. Dayman (2018) for instance noted that "*once you're in [some organisations], there is a ceiling that you can pass through if you have a degree, which you can't pass through if you don't have a degree.*" A degree qualification is also associated with lower unemployment rates (Lamb and McKenzie, 2001). Undeniably then professional occupations provide greater opportunity to transition to higher career positions, and so an encouraging sign is that participation of Aboriginal and Torres Strait Islanders is increasing rapidly in higher education courses of study that are aimed at preparing graduates for health professional practice.

Despite the causes for disappointment outlined above, there is still reason for optimism related to the overall increases in the participation of Aboriginal and Torres Strait Islander workers in the health sector because of the "critical mass effect". While the existence of an Aboriginal and Torres Strait Islander worker was still quite rare for many health professions in the 1996 Population Census (e.g. midwives, physiotherapists, pharmacists, GPs), many of those professions now have a pool of workers of between 100 and 300 Aboriginal and Torres Strait Islander people. This massing effect will almost certainly be an increasingly powerful force for assisting in reducing the effect of culturally unsafe workplaces acting as a barrier to future aspirants wanting to enter those professions.

An increasing presence of Aboriginal and Torres Strait Islander workers in the health sector could therefore have the effect of "speeding up" the process of recruitment of Aboriginal and Torres Strait Islander people. It also has the potential for making those professions more attractive career targets for Aboriginal and Torres Strait Islander workers who are already in the health industry but in a lower paying and/or lower status occupation. The presence of greater numbers of Aboriginal and Torres Strait Islander workers in particular professions in turn also provides a larger pool of appropriate mentors and career coaches to help newer entrants survive and prosper, although such mentors will need to be carefully identified, nurtured and supported through training, development and possibly remuneration.

Further cause for optimism rather than negativity is that the higher proportion of Aboriginal and Torres Strait Islander workers with certificate-level qualifications could be seen as an increasing opportunity for the overall workforce development. This increasing pool of certificate-level qualified workers provides a potentially large cohort of workers with existing and relevant skills and knowledge that could be fast-tracked to bachelor degree-level qualifications. Again of course, full realisation of this opportunity would be predicated on significant support structures being put in place that go beyond limited study leave options and that incorporate other appropriate support and development mechanisms such as high quality practice supervision, suitable mentoring and coaching, fulfilling scopes of practice, and workplace training and development.

Finally, the place of this analysis within the broader suite of studies being undertaken as part of the Career Pathways Project needs to be well understood.

Secondary data has well known limitations. The data is invariably collected for a purpose that will generally not be entirely appropriate for the new purposes it is being directed. Compounding this, as was the case for this study, unit record data is generally not available for reanalysis in a way that might give more insight (for example by analyzing data according to different employer categories). Data specific to career progress of Aboriginal and Torres Strait Islander workers was not available for analysis in this study.

Nevertheless, this analysis provides to the collaboration a macro-economic perspective on a number of workforce phenomena from which career pathway matters can be inferred but not yet definitively described. Data from other studies in the collaboration, however, will provide relevant findings that are more specific to actual career pathways and will in turn help to determine whether the inferences drawn from this study to date are appropriate.

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Appendix 1: The Career Pathways Project

Who we are

The Career Pathways Project is an Aboriginal-led national research project funded by the Lowitja Institute Aboriginal and Torres Strait Islander CRC. This project came about through the merging of two separate but highly complementary proposals (from New South Wales and the Northern Territory) that the Lowitja Institute had received as a result of a call for research into career pathways for Aboriginal and Torres Strait Islander health staff.

At the request of the Institute, these two competitive submissions were combined into a single national project. Across New South Wales and the Northern Territory, the project partners are Bila Muuji Aboriginal Corporation Health Service (Bila Muuji), Maari Ma Health, Western NSW Local Health District (Western NSW LHD), South Western Sydney Local Health District (SWS LHD), Western NSW Primary Health Network, Western Sydney University (WSU), UNSW Sydney, the Aboriginal Medical Services Alliance Northern Territory (AMSANT) and Human Capital Alliance (HCA).

Many individuals contributed to the project by playing key roles in data collection, analysis and writing and are listed below in alphabetical order. The diverse perspectives and expertise of the people who worked together in the project was a major strength. The complexity of working across multiple organisations and jurisdictions also required clear governance structures, which are detailed in the introduction to this report.

Ms Erin Lew Fatt, AMSANT, and Dr Sally Nathan, UNSW Sydney, were the **co-leads** of the project.

The names of Aboriginal members of the Career Pathways Project Team are shown in **bold type** and in ***bold italics*** if they were part of the Aboriginal Reference Group.

Dr Jannine Bailey, WSU
A/Professor Ilse Blignault, WSU
Ms Tania Bonham, SWS LHD
Ms Zoe Byrne, Bila Muuji
Ms Christine Carriage, WSU
Ms Karrina Demasi, AMSANT
Ms Erin Lew Fatt, AMSANT
Mr Justin Files, Maari Ma Health
Ms Sally Fitzpatrick, WSU
Ms Sharon Johnson, AMSANT
Ms Telphia-Leanne Joseph, UNSW Sydney
Ms Kate Kelleher, Kate Kelleher Consulting with HCA
Dr Lois Meyer, UNSW Sydney
Mr Phil Naden, Bila Muuji
Dr Sally Nathan, UNSW Sydney
Mr Jamie Newman, Bila Muuji
Ms Pamela Renata, Bila Muuji
Mr Lee Ridoutt, HCA
Ms Debbie Stanford, HCA
Ms Lesa Towers, Western NSW LHD
Ms Carol Vale, Murawin Consulting with HCA
Dr Megan Williams, UTS and UNSW Sydney

The project used a mixed-methods design and brought together qualitative and quantitative data from primary and secondary sources. The main research activities were: **A literature review | A secondary data analysis | A national survey | Career trajectory interviews | Workplace case studies (NSW and NT) | Stakeholder interviews.** The research approach was iterative, with the different components informing each other as knowledge and evidence built.

A report has been prepared for each of these components of the research activity and relevant members of the team are credited accordingly on those reports (see list of citations below). The overarching report for these combined research efforts is titled *'We are working for our people': Growing and strengthening the Aboriginal and Torres Strait Islander health workforce, Career Pathways Project Report*.

Why this project was needed

Expanding and strengthening the Aboriginal and Torres Strait Islander health professional workforce is recognised as crucial for improving the health and wellbeing of Aboriginal and Torres Strait Islander communities. A key challenge for Aboriginal and Torres Strait Islander managers in both community-controlled and government health services is the recruitment, support, development and retention of a suitably skilled Aboriginal and Torres Strait Islander health professional workforce to meet the health and wellbeing needs of their local community. It is now well recognised that there continues to be a significant shortfall in the Aboriginal and Torres Strait Islander health workforce.

A secondary data analysis (Ridoutt, Stanford & Blignault et al. 2018) shows that over the past twenty years there had been growth in the absolute number of Aboriginal and Torres Strait Islander people in the health workforce, with a significant growth in enrolments and graduations from higher education. However, there has been no real improvement in the proportion of the total health workforce primarily due to an equally rapid growth in the non-Indigenous health workforce. This analysis also shows that growth has been in low status and low paying jobs with shorter salary scale structures with poor articulation into other roles, including professional careers.

Despite the critical need for strengthening the Aboriginal and Torres Strait Islander health workforce, increasing retention and supporting career progression and development, the research to date on how to achieve this has been limited (Meyer, Joseph, Anderson-Smith et al. 2018), with studies largely focused on how best to increase the volume of workers entering health careers by examining issues related to secondary and tertiary education.

The focus of the Career Pathways Project has been on how best to recruit, retain and develop the Aboriginal and Torres Strait Islander workforce. This project has sought and brought together the views and perspectives of Aboriginal and Torres Strait Islander people who work in health in a variety of roles, as well as the views of peaks and affiliates, professional associations, and other key stakeholders in the training and education sector and the health sector that can support them on their journey.

Project aim: To provide insight and guidance to enhance the capacity of the workplaces, and the health system more broadly to retain and support the development and careers of Aboriginal and Torres Strait Islander people in the workforce.

The experiences, stories and journeys shared in this report address the following key research questions:

1. What are the experiences of Aboriginal health staff and health professionals in entering, and progressing, their careers within health services?
2. What factors facilitate Aboriginal health workforce career development and career advancement?
3. What factors impede Aboriginal health workforce career development and career advancement?
4. What are the unique skill sets and values that Aboriginal and Torres Strait Islander health staff and health professionals can, and do, contribute to health services?
5. What can employers do to make a difference to Aboriginal health workforce career development and advancement?
6. What is the influence of jurisdiction, sector, and discipline/profession on career progression, and what aspects of these influences are specific to the Aboriginal health workforce or the health workforce as a whole?
7. How do other stakeholders, including policy makers and educational institutions for example, influence Aboriginal health workforce career progression outcomes?
8. What are the possible solutions and strategies to address the barriers, and better enable Aboriginal health workforce career development and career advancement across sectors and professions/disciplines?
9. What possible monitoring mechanisms could be established to track progress in policy and practice to address the barriers and enablers of career pathways of Aboriginal and Torres Strait Islander health staff and health professionals?

Our Approach in this Project

This section describes the governance structure, ethical approvals, overall approach, methods and data sources used in the Career Pathways Project. The main activities, governance and management structures for the project are shown visually in Figure 10 and the two main coordinating Aboriginal-led coordinating groups were:

The Career Pathways **Project Steering Committee (PSC)** coordinated the jointly led activities and ensured regular communication and information sharing across the NSW and NT teams. It also had decision-making capacity for procedural issues to facilitate the process of multi-site collaboration and provided input to and received direct feedback from the working groups. The PSC was comprised of representatives from both teams and was co-chaired by the AMSANT lead or delegate and Bila Muuji Chair/CEO or delegate and included two additional members from each team. Each PSC member had a role in one or more of the working groups and the Aboriginal PSC members were also part of the Aboriginal Reference Group (see below) to ensure the PSC had an overview of all aspects of the joint project to ensure efficient coordination.

The Career Pathways Project **Aboriginal Reference Group (ARG)** was responsible for the promotion and maintenance of a high level of cultural safety and Indigenous knowledge management across the project and key activities. The ARG was comprised of all Aboriginal research team members involved across the two project teams in NSW and

the NT. It was co-chaired by the AMSANT lead or delegate and Bila Muuji Chair/CEO or delegate as required. Each ARG member had a role in one or more of the working groups, which ensured the ARG had an insight and influence across all aspects of the project. This influence and input at all levels is shown by the ARG circle around the dark purple circles in Figure 10. The ARG also supported the PSC by providing advice and input to its deliberations and could directly refer issues to the working groups or PSC as required.

Additional governance processes were in place for the Northern Territory component, including AMSANT's Indigenous Ethics Committee and approvals by the AMSANT Board for project activities.

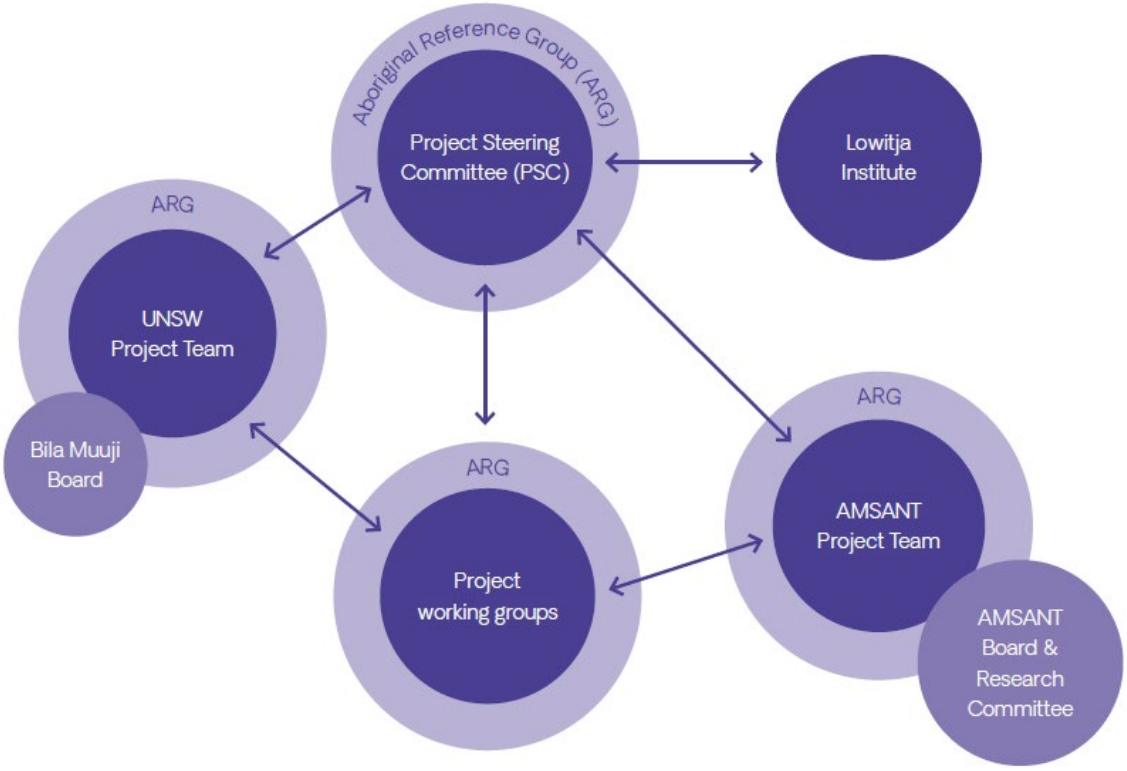

Figure 10: *CPP governance and project management arrangements*

Ethics Approvals

The project received ethics approval from:

- Aboriginal Health & Medical Research Council of NSW Human Research Ethics Committee (Ref. 1306 17)
- Greater Western Human Research Ethics Committee (Approval GWAHS 2017-060)
- Central Australian Human Research Ethics Committee (CA-17-2948)
- Human Research Ethics Committee of the Northern Territory Department of Health and Menzies School of Health Research (2017-2943)
- South Australian Aboriginal Human Research Ethics Committee (04-17-732)
- Western Australian Aboriginal Health Ethics Committee (822)
- St Vincent's Hospital Melbourne Human Research Ethics Committee (Human Research Ethics Committee 186/18).

The project was also supported by the Queensland Aboriginal and Islander Health Council in Queensland. The Human Research Ethics Committees at UNSW and Western Sydney University recognised and noted the ethical approvals in place for the project, and approvals were also provided by the Research Subcommittees of AMSANT, the Kimberley Aboriginal Health Service and Nunkuwarrin Yunti of South Australia.

List of reports from the CPP project

Overarching report:

Bailey, J., Blignault, I., Carriage, C., Demasi, K., Joseph, T., Kelleher, K., Lew Fatt, E., Meyer, L., Naden, P., Nathan, S., Newman, J., Renata, P., Ridoutt, L., Stanford, D. & Williams, M, 2020. *'We are working for our people': Growing and strengthening the Aboriginal and Torres Strait Islander health workforce, Career Pathways Project Report,* The Lowitja Institute, Melbourne.

Individual research component reports:

Bailey, J., Blignault, I., Carriage, C., Joseph, T., Naden, P., Nathan, S. & Renata, P. 2020, *Career Pathways for the Aboriginal and Torres Strait Islander Health Workforce: NSW Workplace Case Studies Report,* Career Pathways Project, The Lowitja Institute, Melbourne.

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