

# Victorian Allied Health Workforce Research Program

## Audiology Workforce Report

March 2018

# Audiology Workforce Report

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

© State of Victoria, Department of Health and Human Services, March 2018

Except where otherwise indicated, the images in this publication show models and illustrative settings only, and do not necessarily depict actual services, facilities or recipients of services. Where the term 'Aboriginal' is used, it refers to both Aboriginal and Torres Strait Islander people. Indigenous is retained when it is part of the title of a report, program or quotation.

# Contents

<b>Contents</b> .....	<b>4</b>
Abbreviations and acronyms .....	6
<b>Audiology executive summary</b> .....	<b>7</b>
Overview.....	7
Key findings .....	7
Conclusions .....	8
<b>Introduction</b> .....	<b>9</b>
Who are audiologists? .....	10
<b>Method</b> .....	<b>11</b>
Macro.....	11
Environmental scan .....	11
Meso and micro level data.....	11
Focus groups and interviews.....	12
Research governance .....	12
Distribution approaches.....	12
Analyses .....	13
Data limitations .....	13
<b>Results</b> .....	<b>14</b>
Responses and respondents.....	14
Allied health workforce questionnaire 2.....	14
Capacity.....	16
Key findings .....	17
Workforce distribution.....	18
Demand.....	26
Supply.....	27
Organisation of the workforce .....	34
Scope of practice.....	40
Workforce movement .....	42
Capability .....	48
Key findings .....	49
Evidence / knowledge base.....	49
Training and continuing professional development.....	50
Clinician knowledge and skills.....	55
Support contexts to enhance capability.....	59
Engagement .....	63
Key findings .....	64
Individual role engagement .....	64
Intra-professional engagement.....	68
Inter-professional engagement.....	69
Engagement with the community and society .....	70

**Conclusion ..... 72**  
**References ..... 73**  
**Appendix ..... 74**

## Abbreviations and acronyms

AA	Audiology Australia
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AH	Allied health
AHA	Allied health assistant
AHPRA	Australian Health Practitioner Regulation Agency
AHWQ2	Allied Health Workforce Questionnaire – 2
CPD	Continuing professional development
DET	Department of Education and Training
EFT	Equivalent full time
ENT	Ear, nose and throat specialist
GP	General practitioner
NDIS	National Disability Insurance Scheme
NFP	Not for profit
VPSC	Victoria Public Service Commission

# Audiology executive summary

## Overview

This report provides an overview of the audiology workforce in Victoria in 2017. It is based on survey responses from 153 individual audiologists (approximately 21% of Victorian audiology workforce (Audiology Australia, 2017)), as well as focus group and interview conversations with five audiologists, and surveys from 42 managers or team leaders of government, non-government, and private organisations that provide audiology services in Victoria.

When contrasted with 2017 data from the Audiology Australia, the respondent cohort included an over-representation of females and lower representation of young audiologists.

## Key findings

Audiology	AHWQ2 survey	Audiology Australia 2017 <sup>a</sup>	DHHS employees <sup>b</sup>
Victorian population	153	744	317
Female	83%	74%	88%
Aboriginal and / or Torres Strait Islander	0	Not recorded	-
Australian trained	89%	Not recorded	-
Age 35 years and under	36%	45%	41%
55 years and older	11%	11%	3%
Median age (years)	39.5	37	38 (average)
Median income	\$70,000 to \$79,999		\$78,809
Public sector	40%	35% (plus 10% 'hospital' includes public and private)	100%
Not for profit sector	4%	2%	0
Private sector	50%	53% (plus 10% 'hospital' includes public and private)	0
Principal area of practice	Hearing aids	-	-
Reporting advanced practice role	18%	-	-
Work with allied health assistants	9%	-	-
Reported use of telehealth	15%		
First qualification to practise	Masters- 52%	-	-
Hold PhD	5%	-	-
Intention to stay in profession for more than five years	81%	-	-
Of those with a clinical supervisor, audiologist as supervisor	91%	-	-
% of workforce in rural areas	1%		

<sup>a</sup> Source: Audiology Australia membership data, 2018

<sup>b</sup> Source: Victoria Public Service Commission data, 2018

The audiology workforce in Victoria is a feminised, young, stable and satisfied profession. Audiologists worked across the private, public and not-for-profit sectors but compared to other allied health professions, they were more likely to work in the private sector (50%), mostly in private clinics. Across their careers, there was a movement of audiologists away from regional areas towards the city and away from hospitals towards private practice. Fitting hearing aids, diagnostic hearing testing and paediatric services were the most frequently reported primary areas of practice.

Audiologists valued work life balance and in general, they achieved that in their roles. Satisfaction rates in the profession were very high. The vast majority of audiologists intended to stay in the profession for the long-term and 40% planned to stay in the same role for more than five years.

Nevertheless, poor opportunities for career progression were a strong and recurring theme in the research. Senior roles were scarce and career pathways were not clear. While most audiologists were confident in their skills, there was evidence of a need to improve non-clinical skills, particularly communication with patients, quality and governance.

Furthermore, the audiology profession has been under some pressure in recent years. An 2017 Australian Competition and Consumer Commission Inquiry into issues around the sale of hearing aids found that clinician independence and integrity had been compromised by use of sales-based remuneration arrangements. Later in 2017, a Federal Parliamentary Inquiry into the Hearing Health and Wellbeing of Australians was released, which reiterated these issues and recommended the Australian Government prohibit such practices in its services and the profession be nationally regulated under the Australian Health Practitioner Regulation Agency. These processes, while considered necessary, were damaging to the profession's reputation and have weighed heavily on professionals who were keen to rebuild trust in the profession. Audiologists also believed that the community and other health professionals needed to have a better understanding of the breadth of services they provide, beyond fitting hearing aids, and the importance of hearing health to general wellbeing.

The Parliamentary Inquiry also foreshadowed a significant increase in audiology services, particularly for vulnerable groups, to meet unmet demand. While there appears to be sufficient numbers of audiologists graduating to fill positions available overall, there was a lack of publicly-funded services in the community, particularly in regional areas and Indigenous communities. If the Parliamentary Inquiry recommendations are implemented, the profession is likely to experience workforce shortages and regional practices will find it difficult to recruit.

## Conclusions

Key areas for future consideration for the audiology profession include:

Rebuilding the reputation of the profession following questions around clinician independence and integrity as a result of sales-based remuneration arrangements

Improving understanding of the profession amongst the community and other health professionals, particularly GPs

Ensuring there are enough publicly funded positions to meet growing demand, particularly for Indigenous communities, children and people from low-SES groups

Supporting professionals in coping with reforms arising from government inquiries into the industry, changing funding arrangements (particularly the introduction of the NDIS), and the possibility of tighter regulatory arrangements

Providing more opportunities for career progression and recognition, possibly through credentialing and formalising advanced scope roles

Developing the non-technical skills of professionals, particularly communication, quality and governance.



# Introduction

The Victorian Allied Health Workforce Research Program (the program) aims to contribute to the evidence base of 26<sup>1</sup> selected Victorian allied health (AH) professions in the public, private and not-for-profit (NFP) sectors in Victoria. The data will be used to inform the policies and programs of the Department of Health and Human Services, provide a platform of evidence on which to build further understanding and development of the AH workforce, as well as guide any improvements to the associated education and training system.

This report presents the data arising from research on the audiology profession workforce in Victoria.

**Please note:** Terminology used in this report reflects that used in the survey process by Southern Cross University, rather than standard Department of Health and Human Services terminology.

The 11 profession specific reports which form the meso and micro levels of this research (as described in the methods section) are based on similar but not identical surveys varied to meet the individual requirements of each investigated profession. Comparative data reflecting the Victorian state context is included wherever possible. While significant effort has been made to make each of these reports as consistent as possible in its presentation of material, differences in available comparative data and other profession specific differences have resulted in some variations in the material included and its presentation.

Throughout these reports the terms *grade* (e.g. 1, 2, 3 etc.) or *level* (junior, intermediate, senior) are used in both the text and quotes from research participants. The term grade refers to the different employment classifications used in the enterprise bargaining agreements (EBA) that individuals may be employed under. These EBAs (awards) generally cover the public sector employees and larger private sector organisations. These grades determine pay rates and benefits, and in some cases job responsibilities and job titles. The exact description and meaning of each grade will vary with the different awards. For individuals who were not employed under these awards (e.g. private business owners, contractors etc.) the term level was used to try and equate their job responsibilities and pay to those employed under the formal EBA structure. These terms were also used to determine the breakdown and specific issues relating to junior, intermediate and more senior members of the specific professions in Victoria.

---

<sup>1</sup> In the earlier reports from this project (2016 and 2017), the Department of Health and Human Services (Victoria) recognised 27 allied health professions in Victoria. In 2017 the Department of Health and Human Services combined the two aspects of medical physics (diagnostic imaging and radiation oncology) into one profession – Medical Physics, resulting in 26 allied health professions being recognised in the State.

# Background

## Who are audiologists?

Audiologists are autonomous professionals who specialise in the prevention, identification, diagnosis and treatment of hearing, balance and other auditory disorders. They work with infants, children and adults who experience these difficulties through causes such as hereditary and genetic disorders; prenatal conditions; exposure to noise, trauma and disease; and ageing.

Audiology services are provided through hospitals, community health clinics, government funded agencies, hearing aid clinics, cochlear implant clinics, private practice, university clinics, medical practices, ear nose and throat (ENT) specialist clinics, occupational hearing conservation programs, programs for occupational noise injury, and community awareness and consumer advocacy. Audiologists are also involved in research to develop new hearing aids and cochlear implants, hearing health therapies, and testing procedures (Audiology Australia (AA), 2010, AA, 2008).

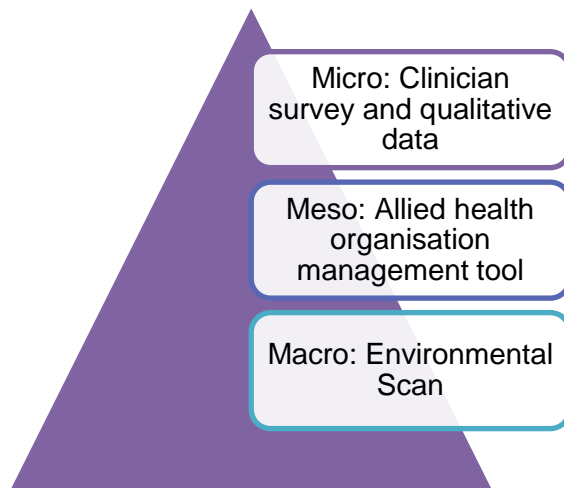
Qualifying as an audiologist requires completion of a relevant bachelor degree followed by a two-year master's degree in clinical audiology.

Audiology is not a registrable health profession under the *National Registration and Accreditation Scheme / Australian Health Practitioner Regulation Agency (AHPRA)*. *Audiology Australia (AA)* provides self-regulation for the profession and is a member of *the National Alliance of Self Regulating Health Professions*. AA accredits university master's programs and provides clinical certification to award professionals with *Audiology Australia Accredited Audiologist* status. In order to provide hearing services under the Australian Government's *Hearing Services Program*, an audiologist must be a member of either AA or the Australian College of Audiology.

# Method

A three-tiered approach was used to capture workforce data at macro, meso and micro levels (Figure 1).

**Figure 1: Three-tiered research approach**



## Macro

### Environmental scan

The environmental scan examined 26 AH professions in Victoria during the first six months of the research program. The process involved engagement with each of the professional associations regarding workforce trends and issues alongside an analysis of a range of existing data sources. A 'snapshot' was generated for each profession which included key workforce statistics, workforce trends and issues presently affecting the profession, and those likely to affect the profession in the future. An environmental scan has been produced as a stand-alone document for each profession. Relevant findings from the audiology profession environmental scan have been incorporated into this report.

### Meso and micro level data

Subsequent to the environmental scan, four professions (physiotherapy, sonography, speech pathology and allied health assistance) were analysed in-depth in 2015 – 16, and a further three professions (occupational therapy, social work and psychology) were analysed during 2016 – 17. In the final phase of this project (2017) an additional four professions were included in the in-depth analysis (audiology, dietetics, exercise physiology and medical laboratory science). This analysis included organisational and individual level approaches as described below. These professions were selected by the Department of Health and Human Services for further study because they were either high priority professions or they were unregistered professions with limited existing data available. The in-depth analysis involved the use of a standardised survey and focus groups with both standardised and profession specific questions.

In year one of the research program, three separate surveys were used to access data at an individual (Allied Health Workforce Questionnaire), team (Allied Health Organisation Mapping Tool) and organisation level (Allied Health Human Resources Tool). For year two and three of the program, the questions from the three surveys were combined into a single tool (Allied Health Workforce Questionnaire 2 (AHWQ2)), and internal survey logic was used to direct respondents to the appropriate questions according to their role/s or perspective within an organisation.

The AHWQ2 collected the following information:

At the organisational level, team leaders, managers or directors of human resources were asked to provide information about the geographic location, numbers and grades of staff, skill set, recruitment and retention issues, and organisational contexts of the profession. It was completed at a regional or organisational level, typically by a team leader or human resources department, to provide detailed information about the workforce structure and organisation.

Individual clinician data captured information about education and training, the nature of work, location of work, job satisfaction and career development opportunities, as well as open ended questions exploring issues that the profession specifically identified as being important.

Participants who completed the AHWQ2 were invited to provide their contact details for future follow-up.

## Focus groups and interviews

Survey respondents who agreed to be followed-up via email were invited to participate in a focus group. One focus group was run with a mixture of participants. Two individual interviews were also conducted to accommodate participants who experienced difficulties joining the focus groups. The conversations with professionals explored issues that were highlighted in the survey responses. The questions were developed in consultation with the reference groups and Department of Health and Human Services. Each focus group was held via videoconference using Zoom and was approximately 90 minutes in duration. The focus group was recorded and detailed contemporaneous notes were taken and used as the basis for analysis. Where necessary the recordings were accessed for clarity or confirmation.

## Research governance

The research was overseen by an overarching research advisory group comprising experts from many health disciplines and sectors. In addition, each of the four professions had a discipline specific reference group comprising members of the profession who represented specific sectors or subgroups (such as new graduates, public, private and NFP sectors, and academics). The advisory group and the reference groups were consulted about the research approach, survey distribution methods and engagement strategies, as well as providing substantial input into the survey content and piloting. The discipline specific reference groups also advised on the content of the focus group questions, aided the interpretation and verification of the final reports, and provided feedback on the penultimate drafts of the discipline specific reports.

## Distribution approaches

Surveys were initially distributed through the reference groups, the professional associations and Department of Health and Human Services contact lists. In addition, a communications database was developed comprising employers, professional networks and associations, individual professionals and relevant contacts for each profession. This database has continued to be developed throughout the research program.

At the launch of the survey, the research project team distributed over 2,000 emails to employers of audiologists. These emails provided information about the research program and a link to the survey. The following organisations received emails:

- Public hospitals (94) and private hospitals (61), as listed by the Victorian Government
- Relevant National Disability Insurance Scheme providers in Victoria (357), as listed on the National Disability Insurance Agency website
- Community services (138) as listed by the Victorian Government
- Aboriginal Community Controlled Health Organisations (23)
- Relevant Comcare providers (35), as listed at <https://www.comcare.gov.au/>
- Victorian City and Shire Councils (79)
- Rural Workforce Agency of Victoria

- Services for Australian Rural and Remote Allied Health
- Indigenous Allied Health Australia
- Victorian Primary Health Networks (5)
- Victorian Primary Health Network Alliance

In addition, emails, the survey link and information about the survey was sent to professional groups associated with audiology including AA, Hearing Business Alliance, Hearing Care Industry, Independent Audiologists Australia, the Hearing CRC research organisation, Taralye, Victorian Deaf Education Institute, Aurora, Early Education Program for Hearing Impaired Children, Hear Services and the Victorian universities that offered audiology courses.

A reminder email was sent to all relevant organisations two weeks prior to the close of the survey.

Although the intention was to send a third and final email to all organisations in the final days of the survey, the strategy was changed to specifically focus on use of social media and direct communication to members through professional associations. This change was made due to feedback that stakeholders were frustrated by the repeated communication in the context of high expectations to contribute to a range of research that also involved survey completion.

Other methods of distribution and marketing included Department of Health and Human Services newsletters, marketing on social media (e.g. Facebook and Twitter), a presentation at the Victorian Allied Health Research Conference, regional conference presentations, and presentations to individual professions.

The survey was circulated between 7 September 2017 and 30 October 2017.

During the time the survey was open the program's Facebook page made 160 posts, had 292 new followers, received 50 comments, 121 shares, 411 clicks on the link and 12 inbound messages. The Twitter account made 108 tweets, had 20 followers, and made 40 points of engagement.

## Analyses

The Qualtrics survey tool generates descriptive statistics (frequencies, means, standard deviations, etc.) for all questions which are downloadable in Microsoft Word and Microsoft Excel formats. Further analyses were undertaken using cross tabulations of specific questions results, and comparisons with other available data from the Australian Bureau of Statistics (ABS) Census, Health Workforce Australia, Department of Health and Human Services, and profession specific associations.

## Data limitations

- The challenge of distributing and marketing a survey commissioned by a single government department to distributed health services, non-government services and private providers may lead to the data not be representative of the profession.
- The focus group participants were invited from the 44 AHWQ2 respondents (29%) who agreed to be followed-up. Despite numerous attempts to engage these individuals, only a small number of audiologists actually participated in a focus group or interview.
- The audiology profession was experiencing significant upheaval at the time of the data collection, with major changes to funding models occurring along with the release of *Still waiting to be heard...*, *Report on the Inquiry into the Hearing Health and Wellbeing of Australia*, (Parliament of the Commonwealth of Australia, 2017). This inquiry contains 22 recommendations to reform the industry. The lower than expected response rate to the survey and the focus groups was likely attributable in part to consultation fatigue and general fatigue within the profession as a result of lengthy industry reform processes.

# Results

The source of data in the tables and figures going forward is the AHWQ2 survey data unless otherwise stated.

## Responses and respondents

Respondent numbers for each of the different data collection methods are presented in Table 1 below.

**Table 1: Responses and respondents**

AHWQ2 (individual respondents)	AHWQ2 (organisational respondents)	Focus groups and interviews
153	40	Focus group – 3 participants Individual interviews – 2 (participants were close to equally balanced from public and private sectors)

## Allied health workforce questionnaire 2

The AHWQ2 survey was completed at both the organisational and individual practitioner level. The respondents to the organisational / managerial level questions were presented with 12 questions, plus four questions that were conditional on answers to previous questions; the individual clinicians were presented with 66 questions plus seven questions that were conditional on the answers from previous questions. Completion of the survey was voluntary and respondents, both organisational and individual, had the opportunity to choose if they wished to answer a question or not. Some questions allowed for multiple answers. As a result, the number of responses for each question varied and is included in the presentation of the data for each question.

A total of 153 professionals completed at least one question on the survey and submitted their survey. This represented 21% of the 744 individuals working in Victoria as audiologists in 2017 (AA, 2017). The survey was completed<sup>2</sup> by 112 individual audiologists. The range of responses to an individual question was from 21 to 537<sup>3</sup>. Responses from all persons who answered an individual question have been included, irrespective of whether they completed the entire survey or not (Figure 2).

A total of 40 employers or managers of audiologists completed the AHWQ2. The organisations they represented employed a range of 0.1 to 118 full time equivalent audiologists. Fifty five per cent (55%) of these people were team leaders of a single or multiple teams, 33% were private business owners and 10% were CEOs or human resources representatives of small or large organisations.

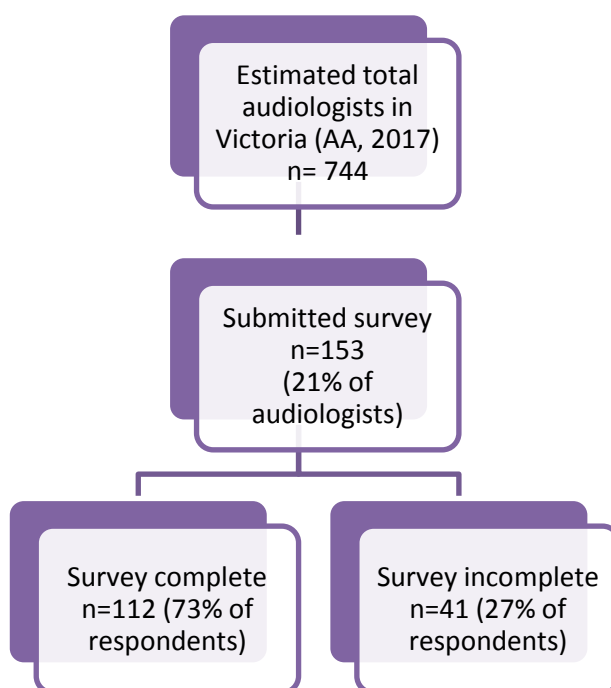
<sup>2</sup> A survey was considered complete if the respondent answered the last survey question and submitted the survey, even if they did not provide answers to every survey question.

<sup>3</sup> Some questions allowed for multiple responses.

**Table 2: AHWQ2 respondents compared to AA data**

Demographics	AHWQ2		AA members (95% of workforce)	
	n	%	n	%
Female	109	83%	561	74%
Aboriginal and / or Torres Strait Islander	0	0%	-	-
Australian citizen / permanent resident	129	98%	-	-
Age 55 and over	14	11%	75	11%
Age 35 and under	46	36%	311	45%
Median age (years)	39.5	-	37	-

**Figure 2: Survey responses**



## Capacity

Capacity refers to the ability of the profession to meet the needs of the community in terms of workforce numbers and allocation of staff, skill mix, ratios, geographic distribution, organisation of the workforce, and their ability to influence these factors at a political, professional and organisational level (Figure 3).

**Figure 3: Workforce capacity framework**





## Key findings

- Thirty-six percent (36%) of respondents were 35 years and under, with the age range being from 24 to more than 75 years.
- Seventy percent (70%) of respondents were based in metropolitan regions
- Most participants were split across the private sector (42%), the Victorian public sector (20%) and the Commonwealth public sector (20%),
- The vast majority were in permanent employment (88%), and worked Monday to Friday during the day (91%).
- Over half (51%) of the respondents earned more than \$80,000 a year.
- Older adults were the age group supported by the greatest proportion of respondents, with 44% of respondents focussing their services on 'over 50s'. 19% of respondents focussed on children aged 2-12 years.
- On average, respondent caseloads included 6% of people from Aboriginal and / or Torres Strait Islander backgrounds and 35% from culturally and linguistically diverse backgrounds.
- The most prevalent service delivery settings were private clinic (49%) and hospital in or outpatient (19%).
- Fitting hearing aids, diagnostic hearing testing and paediatric services were the most frequently reported primary areas of practice.
- Audiology respondents accessed a range of programs to fund their services, the most prevalent being from the Australian Government through Department of Veterans Affairs funding (16%) and the Hearing Services Program (16%) as well as private health insurance (12%) and WorkCover (11%).
- Across their careers, there was a movement of audiologists away from regional areas towards the city and away from hospitals towards private practice.
- Most respondents (62%) intend to stay in the audiology profession for more than 10 years.
- Organisational respondents had advertised very few audiology positions in the last twelve months and only two senior positions.
- There does not appear to be evidence of workforce shortages overall, with enough graduates entering the workforce to fill jobs available. However, there are not enough publicly funded positions to meet the potential need in the community, particularly in regional areas and Indigenous communities.
- The recent Parliamentary Inquiry into the Hearing Health and Wellbeing of Australia foreshadows a significant increase in services to meet unmet demand.

## Workforce distribution

### Demographics

Based on data from AA, it is estimated there were approximately 744 audiologists working in Victoria 2017<sup>4</sup> (AA, 2017).

Of the total cohort of 153 AHWQ2 respondents, 95% were employed in the audiology workforce in Victoria at the time of completing the survey.

As detailed in Table 2, the audiology respondents were predominantly female (83%, n=109). This is slightly higher than the 74% of AA members (2017) who were female, but lower than the percentage of females identified in the Victoria Public Service Commission (VPSC) audiology workforce (88%) (VPSC, 2016).

Just over a third (36%) of the AHWQ2 respondents were age 35 years and under. This is lower than data from Audiology Australia which reported 45% of Victorian audiologists were 35 years and under in 2017 (AA, 2017) and lower than the number of young professionals employed in the public system (41%) (VPSC, 2016).

Individuals age 55 years and over constituted 11% of respondents; which is the same as the proportion recorded by AA for the 2017 workforce (AA, 2017) but higher than the proportion of audiologists over 55 years employed by the Victorian Government, at only 3% (VPSC, 2016). The median age of audiology respondents was 39.5 years (range 21 to over 75 years). This is slightly higher than AA's median age of 37 years (Table 3 and Figure 4).

The median age of the public sector survey respondents is 43 years, which is significantly higher than the median age of private sector respondents, 32 years.

The survey sample has a higher representation females and lower representation of young audiologists than the general audiology population.

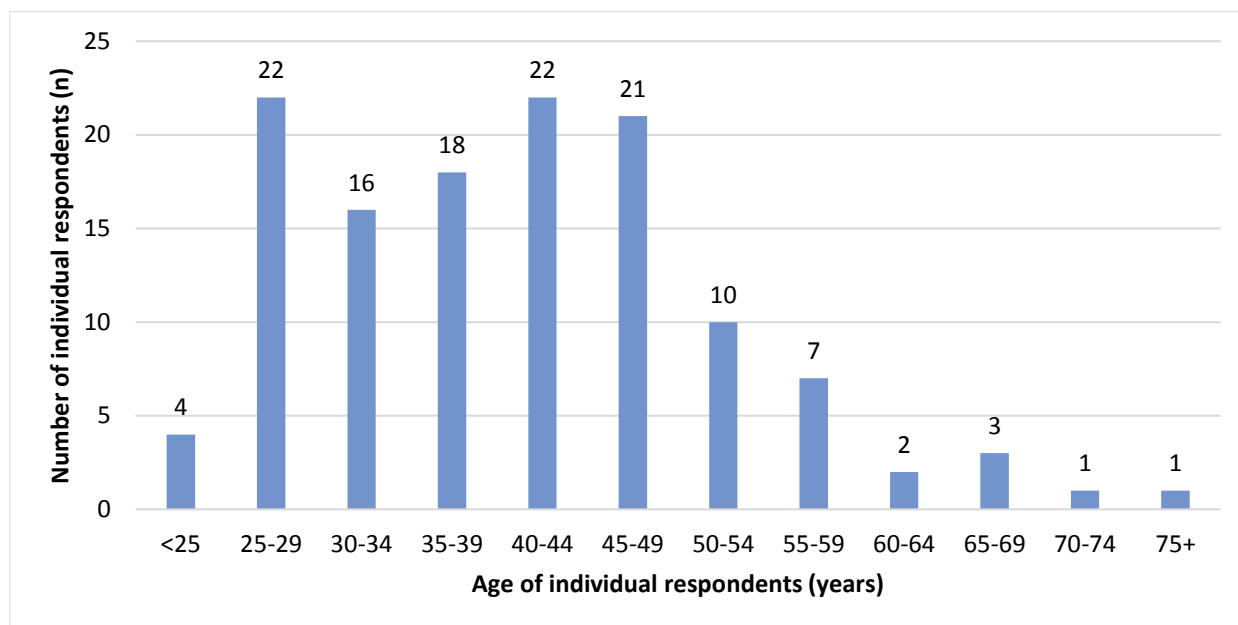
**Table 3: AHWQ2 respondent demographics compared with AA and VPSC data (2017)**

Demographics	AHWQ2		AA 2017		VPSC	
	n	%	n	%	n	%
Female	109	83	561	74	279	88
Aboriginal and / or Torres Strait Islander	0	0%				-
Australian citizen / permanent resident	129	98	-	-		-
Age 55 and over	14	11	75	11		3
Age 35 and under	46	36	311	45		41
Median age (years)	39.5	-	37	-	38.1 <sup>a</sup>	

<sup>a</sup> VPSC reports average age rather than median age

<sup>4</sup> Audiology Australia represents the vast majority of audiologists practising in Victoria. It is estimated 95% of Victorian audiologists are members of Audiology Australia. The organisation had 707 accredited members in 2017, meaning there were likely to be approximately 744 audiologists practising in Victoria.

**Figure 4: Age in 2017 (n=127)**



### Geography

The audiology AHWQ2 respondents were predominantly from metropolitan areas (72%), including 55% who described their main region of work as inner-metro and 18% as outer-metro. This is consistent with data from Audiology Australia which also shows that 72% of its members are metro-based. In combination, rural and regional respondents made up 28% (n=33) of the AHWQ2 respondents, which is exactly the same as the proportion of rural and regional members of AA (AA, 2017) (Table 4).

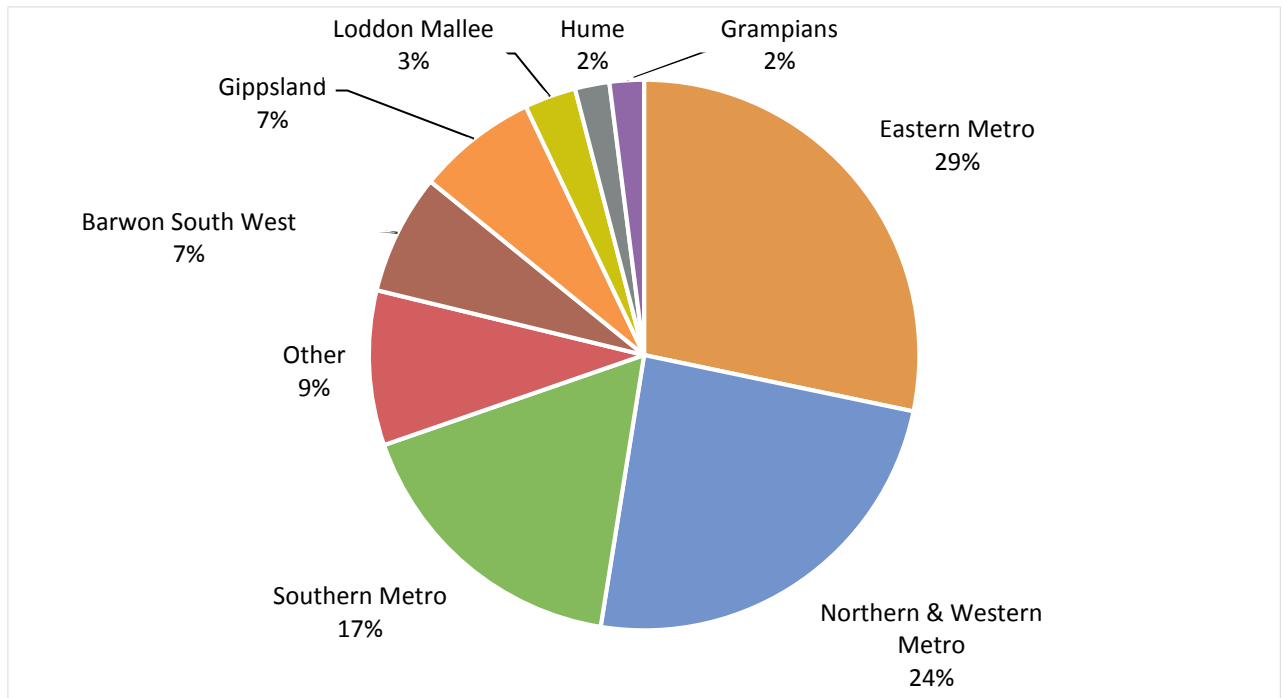
**Table 4: Region of work (n=119)**

AHWQ2			AA 2017		
Region	%	Count	Region	%	Count
Inner-metro	55	65	Metropolitan	72	122
Outer-metro	18	21			
Inner-regional	24	28	Regional town, rural area	28	307
Outer-regional	3	4			
Rural	1	1			
<b>Total</b>	<b>100</b>	<b>119</b>		<b>100</b>	<b>429*</b>

*\*Note: A significant number of Audiology Australia members did not indicate the suburb or postcode of their work. This count is a representative sample*

Over half the AHWQ2 respondents worked in the eastern or northern and western metropolitan areas of Melbourne. There were very few respondents from the Grampians, Hume or Loddon Mallee regions; however responses were received from audiologists working in each Department of Health and Human Services region. Nine per cent (9%) reported working outside of the state of Victoria (Figure 5).

**Figure 5: Main place of work by Department of Health and Human Services' region (n=123)**

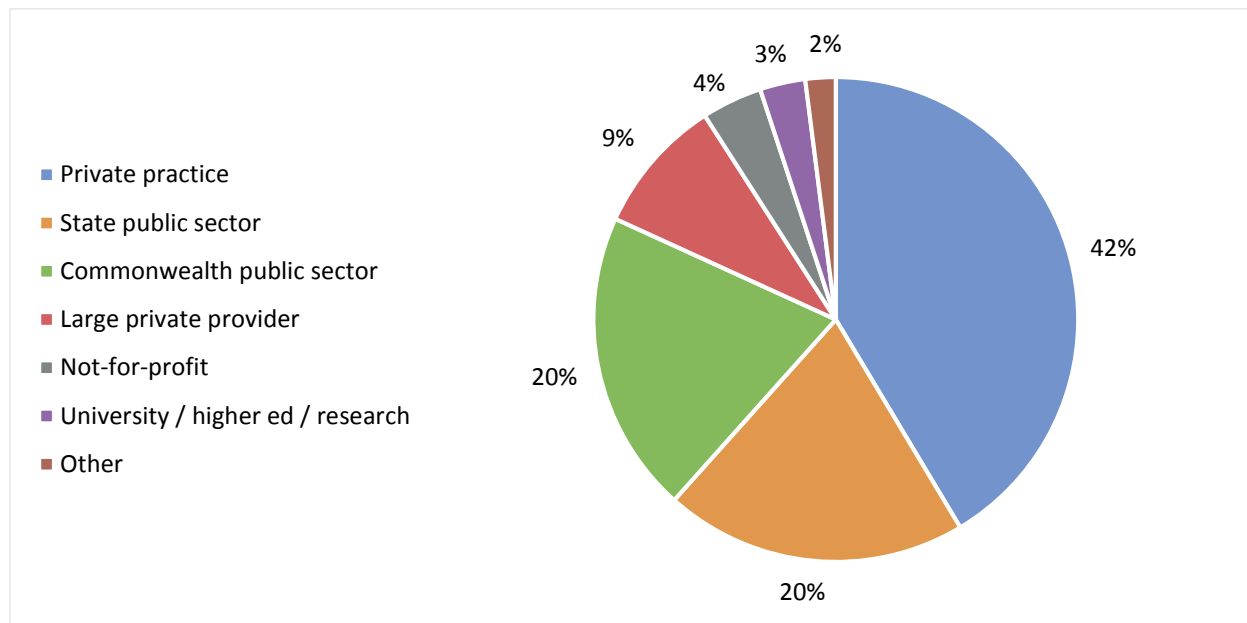


### **Sector**

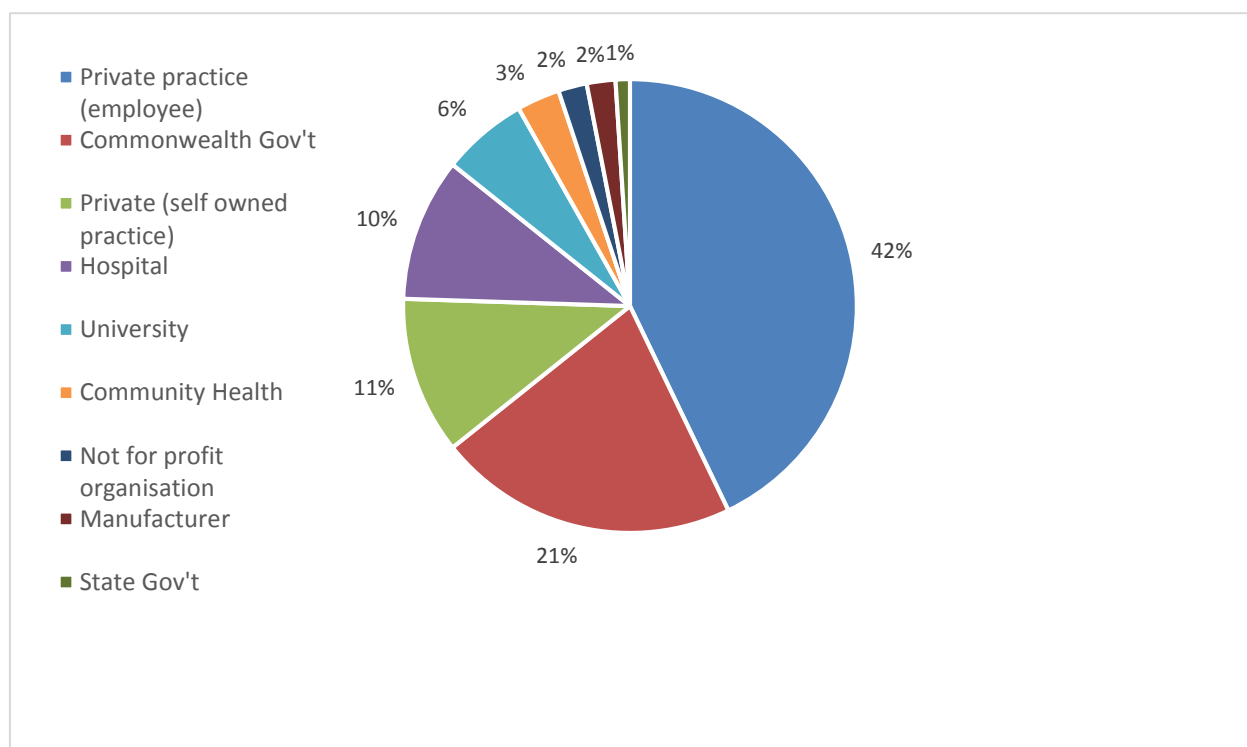
Over half of audiologist respondents worked in the private sector with 42% in private practice and 9% working for a large private provider such as a private hospital. About 20% of respondents worked for each of the State public sector and the Commonwealth public sector, with very small numbers of audiologists working in the NFP sector (Figure 6).

AA membership data reflects a similar proportion of Commonwealth public sector employees (21%) but lower numbers in the State government. If the State government, hospital and community health employees were all assumed to work for the State public sector, this sector would account for 15% of AA membership. However, it is likely that some of these audiologists would be working in private hospitals (Figure 7). AA membership data includes a higher proportion of audiologists in private practice at 53% for both private employees and self-owned practices, compared to the AHWRP2 respondents.

**Figure 6: Employment sector of current main employer (n=127)**



**Figure 7: Employment sector of AA Victorian members (n=687)**

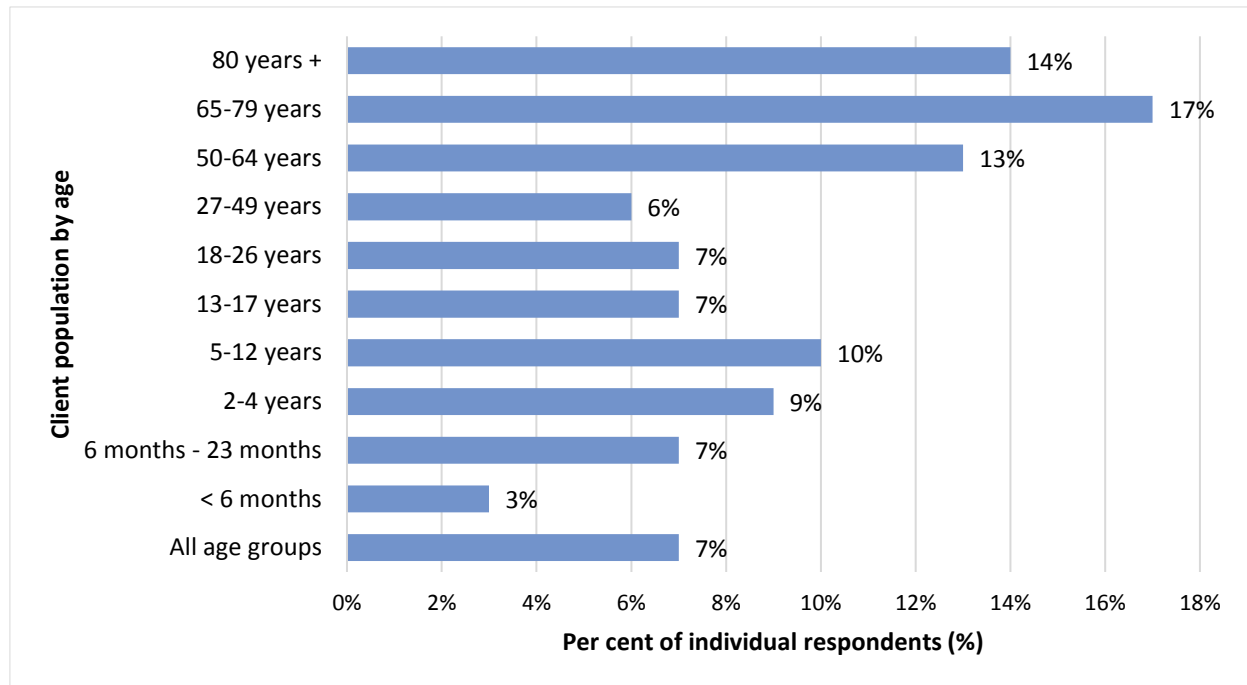


**Clients**

The audiology respondents worked across all age groups, from the very young to the very old (Figure 8). However, presumably due to prevalence of age-related hearing loss in the community, 44% of respondents said they mainly work with people over 50 years, with 65-79 being the most prevalent age category. The recent Parliamentary Inquiry into Hearing Health and Wellbeing of Australia (2017) noted that this client group required even more attention, recommending that an education and awareness campaign be initiated to “encourage people who may be experiencing hearing loss to seek assistance and encourage general practitioners (GPs) and other relevant medical practitioners to actively enquire

about the hearing health of their patients, particularly those aged 50 years and over”. The Inquiry also recommended that the provision of hearing services to residents in aged care facilities be reviewed to improve services.

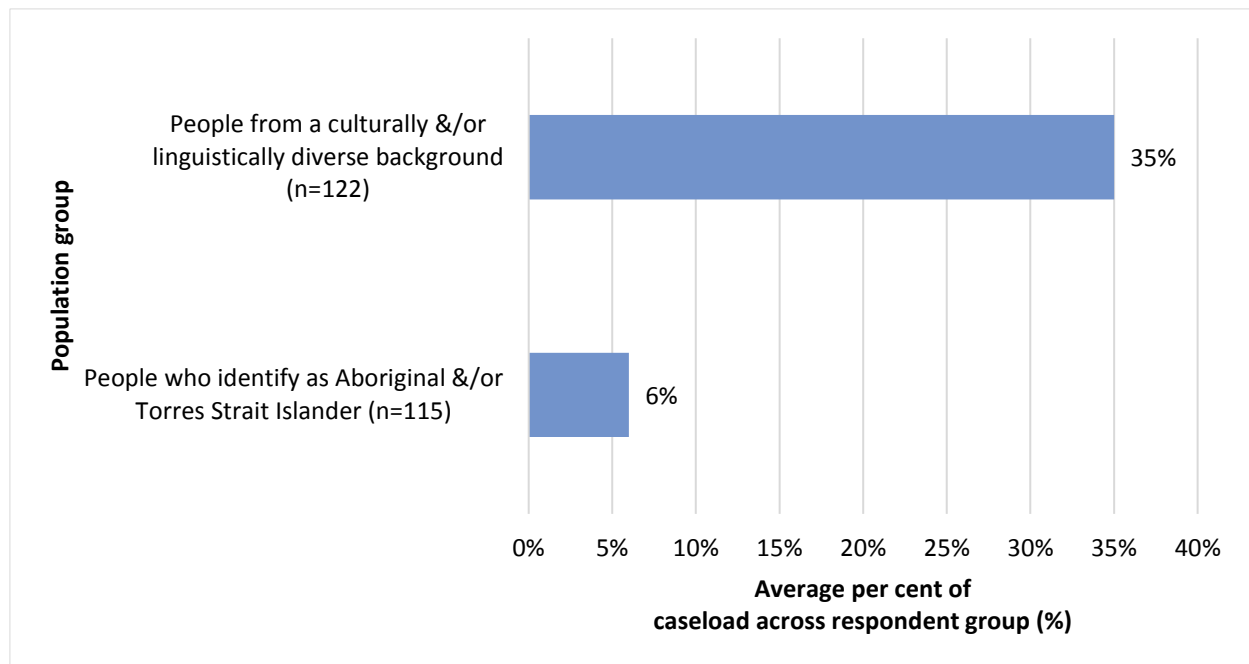
**Figure 8: Clients by age (n=124)<sup>a</sup>**



<sup>a</sup> Respondents could select more than one response.

When considering specific population groups, on average, clients who identified as Aboriginal and / or Torres Strait Islander constituted 6% of the caseload of AHWQ2 respondents. On average, one third (35%) of respondents’ caseloads were constituted of people from culturally and linguistically diverse backgrounds (Figure 9). Services to Aboriginal and Torres Strait Islander communities were also a key focus of the Parliamentary Inquiry into Hearing Health and Wellbeing of Australia, with recommendations to develop a national strategy to improve hearing health in these communities and that resources be significantly increased to expand access to remote communities and reduce waiting times for Aboriginal and Torres Strait Islander children requiring treatment.

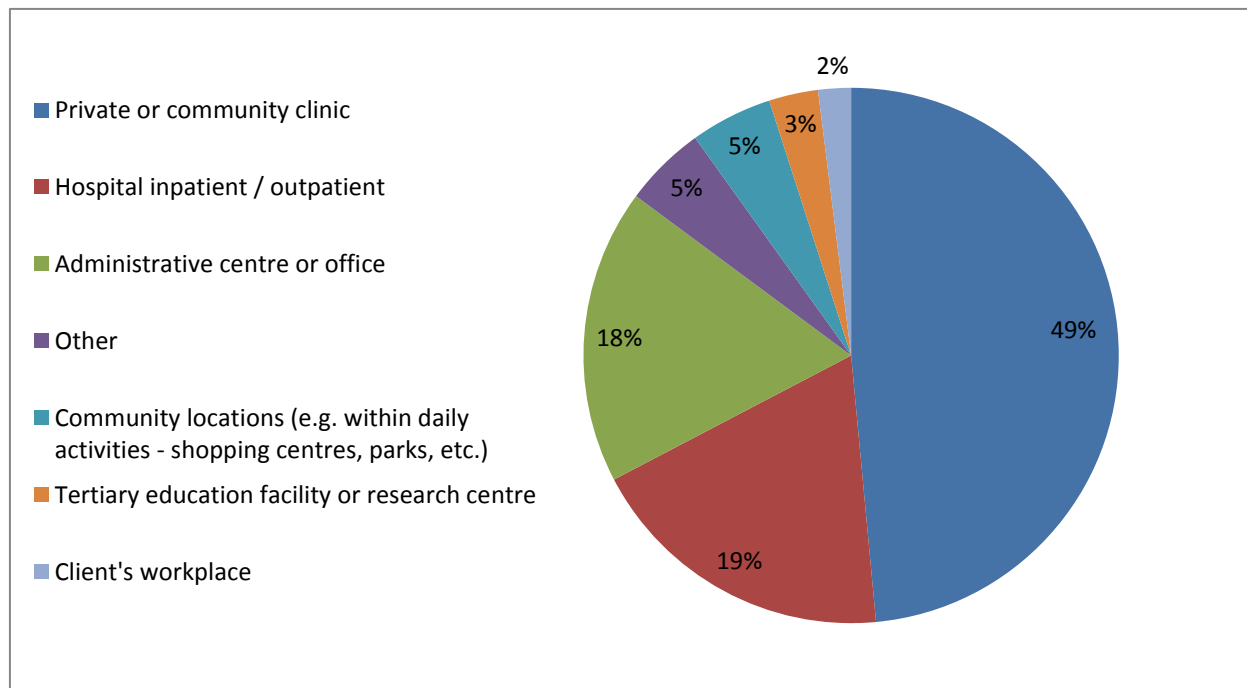
**Figure 9: Average per cent of population groups represented within caseloads**



**Settings**

Nearly half of AHWQ2 respondents (49%) indicated private or community clinic as the setting for audiology service delivery of their main employer. Hospital inpatient or outpatient, and administrative centre or office were also common work settings, with a small number of services being provided in community locations, client workplaces and tertiary education facilities (Figure 10).

**Figure 10: Setting for service delivery of current main employer (n=127)**

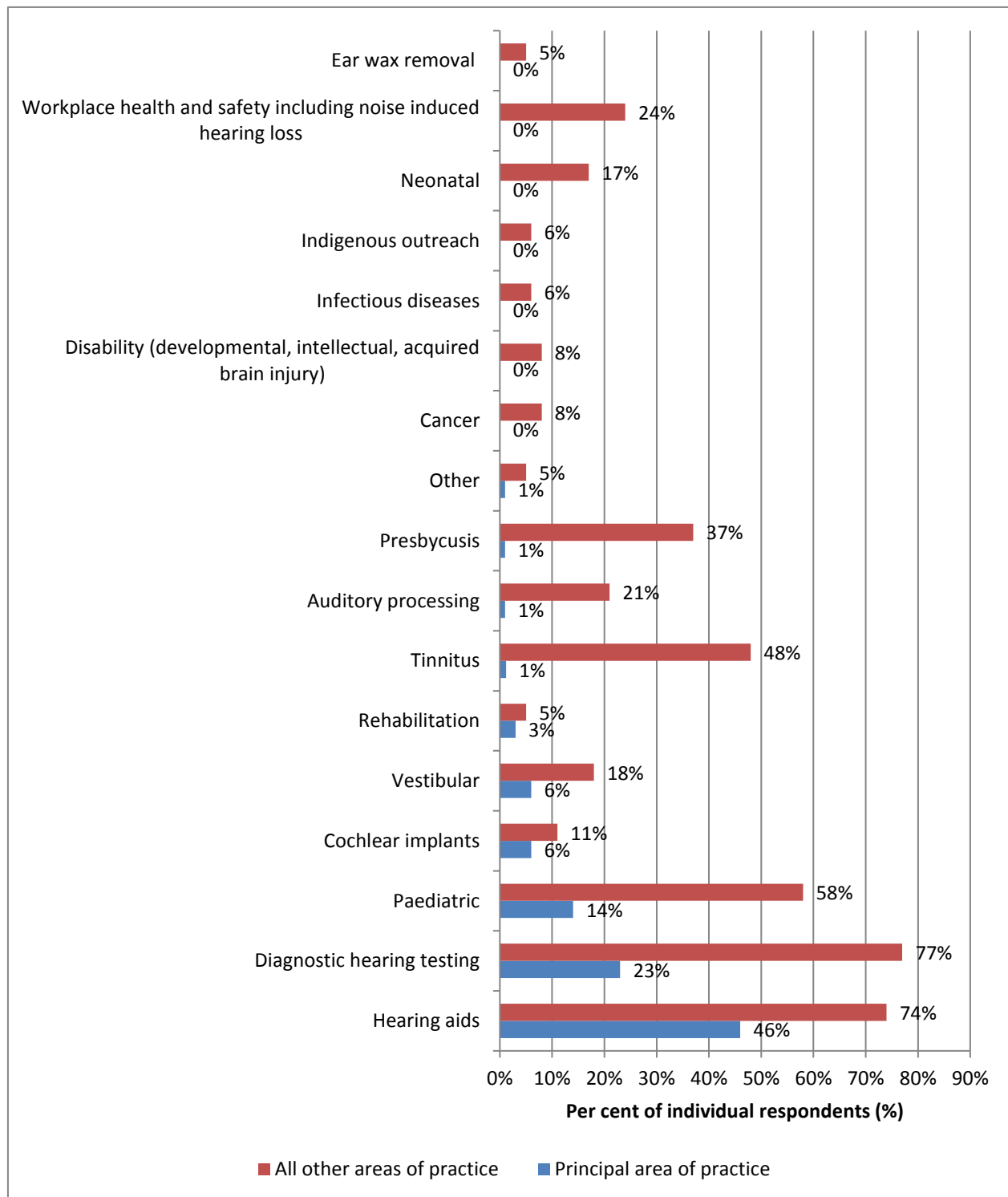


### **Area of practice**

Sixty-nine percent (69%) of audiologists said their primary focus was fitting hearing aids and diagnostic hearing testing. Other main areas of practice were paediatric, vestibular, cochlear implants and rehabilitation. Audiologists also worked across a range of other areas of practice, most commonly presbycusis, workplace health and safety, auditory processing and vestibular services (Figure 11 and Appendix Table 1).



**Figure 11: Areas of practice (n=124)<sup>a</sup>**



<sup>a</sup> Respondents could select more than one response to signify 'all other areas of practice'

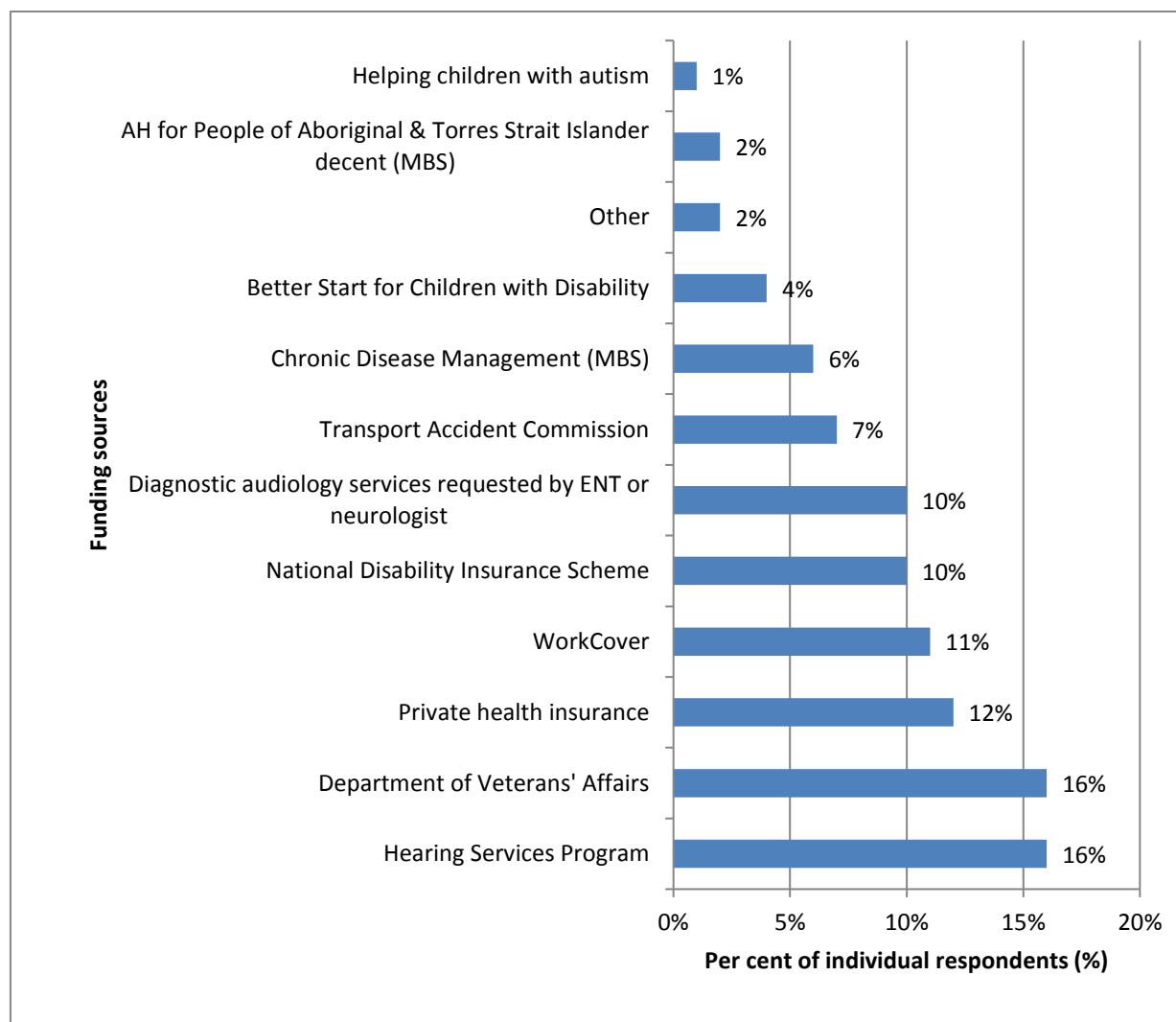
**Funding sources**

There were a wide range of specific funding programs reported as being used to support delivery of services to individual audiology clients. The most common funding sources respondents accessed on behalf of clients were the Department of Veterans Affairs and the Hearing Services Program administered by the Office of Hearing Services. Sixteen per cent (16%) of respondents accessed each of these funding sources. Other programs regularly accessed included private health insurance and

WorkCover (accessed by 12% and 11% of respondents respectively), the National Disability Insurance Scheme (NDIS) (10%), and diagnostic audiology services requested by an ENT specialist or neurologist (10%) (Figure 12). Along with the programs listed in Figure 12, audiologists identified a number of other funding sources including bulk-billing through a doctor's provider number, Comcare, fee –for-service, and community health, mental health, Closing the Gap and Weighted Ambulatory Service Event funding.

Of the respondents who answered this question, the average number of funding sources identified by an individual audiologist was 4.5 sources.

**Figure 12: Per cent of respondents providing services funded by specific packages (n=109) <sup>a</sup>**



<sup>a</sup> Respondents could select more than one response.

## Demand

Organisational and individual respondents to the AHWQ2 did not provide quantifiable measures of demand for the audiology profession. Over half (52%), indicated there was no evidence of workplace shortages, while 30% of organisations stated there was evidence of workforce shortages including:

- Increased wait times for services
- Increased pressure on professionals providing the services
- Reduced access to services for clients

The qualitative data indicates that there are plenty of qualified professionals to meet demand in metropolitan areas but there are not enough funded positions. Much of the demand is occurring in regional and remote areas where experienced staff were needed because there was not sufficient supervision for new graduates.

*“Up to nine months after graduation audiologists will be working in cafes. It’s astounding given the need. But they don’t want to go to remote areas and there is no supervision there. In regional areas they need people who are senior.”*

Another issue is that meeting hearing health needs and reducing waitlists in the community requires a concurrent expansion of audiologists and ENT specialists. If the ENTs are not available to process the referrals, then an increase in audiologists can only meet a proportion of demand.

*“Access to hearing tests is via ENT clinics. That might be 12 to 18 month wait for review. If they want to expand us, they need to expand ENT too. You need the two together. To deal with the ENT waitlist you need to have both.”*

The recently released report of the Inquiry into the Hearing Health and Wellbeing of Australia foreshadows a significantly increased demand for audiologists in coming years. The report recommends that hearing health be treated as a national health priority and much more needs to be done to respond to Indigenous hearing health, which is at a crisis point (Parliament of Australia, 2017) Implementing the report’s recommendations would see an increase in audiology services in aged care facilities, in Aboriginal and Torres Strait Islander communities – urban, regional and remote, as well as for agricultural workers, people on low incomes and children in their first year of school.

The Australian Government, Department of Employment’s *Job Outlook* initiative does not include audiology.

## **Supply**

There are a number of factors that interact with and influence the supply of audiologists. These include the size of the audiology profession workforce, the number of graduating audiologists, the age and gender profile of the workforce, employment grades, remoteness, remuneration and local approaches to recruitment.

### **Audiology profession workforce**

In 2017, there were 707 audiologists as Victoria members of AA. AA estimates that they represent 95% of the workforce; based on that there would be approximately 744 audiologists in Victoria.

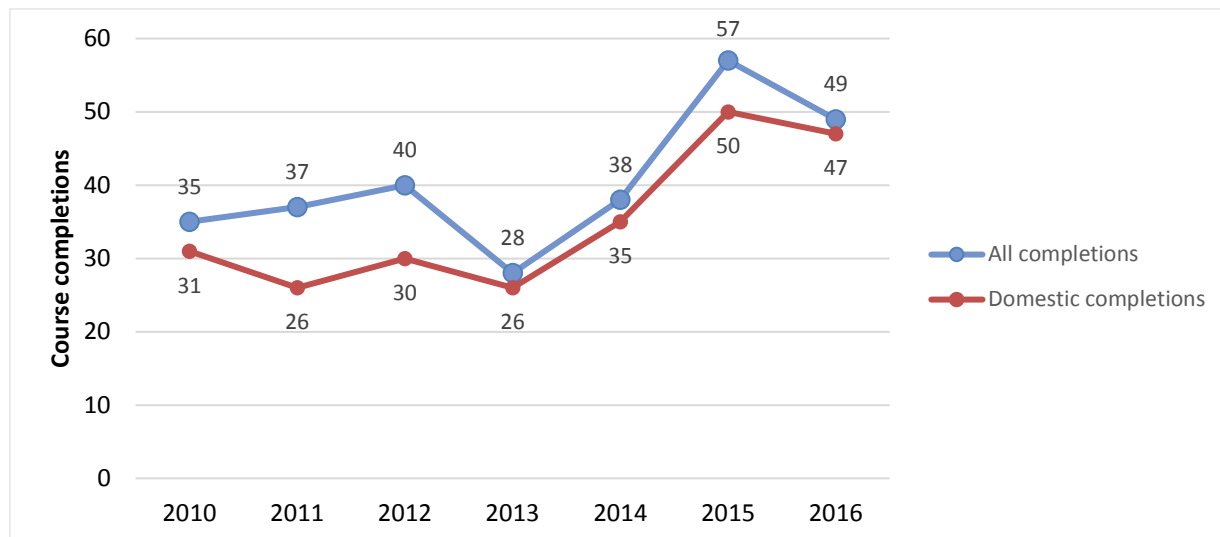
### **Student completions**

In 2016, 47 audiology students completed audiology training at a Victorian tertiary education facility (unpublished data, Department of Education and Training<sup>5</sup>). This figure is down slightly from the 50 completions the year before but represents a 40% increase since 2010 when only 35 students completed audiology training (Figure 13). This increase is mostly explained by the introduction of a new course in Victoria. Previously, audiology training was only offered by the University of Melbourne, but in 2015 La Trobe University began offering a Master of Clinical Audiology. Ten students graduated from the La Trobe course in 2015.

---

<sup>5</sup> The Department of Education and Training (DET) conducts the Higher Education Statistics Collection, which provides information on the number of student commencements and completions in higher education courses. While DET data does not identify those courses that lead to professional-entry for most disciplines, using information supplied by DET (in a particular field of education and course name), the Victorian Department of Health and Human Services has estimated the number of domestic students commencing and completing professional-entry courses for selected disciplines. Given this is an estimate; caution should be used in interpreting these data.

**Figure 13: Victorian university course completions 2010-2016**



Source: Department of Education and Training

**Workforce oversupply / job shortages**

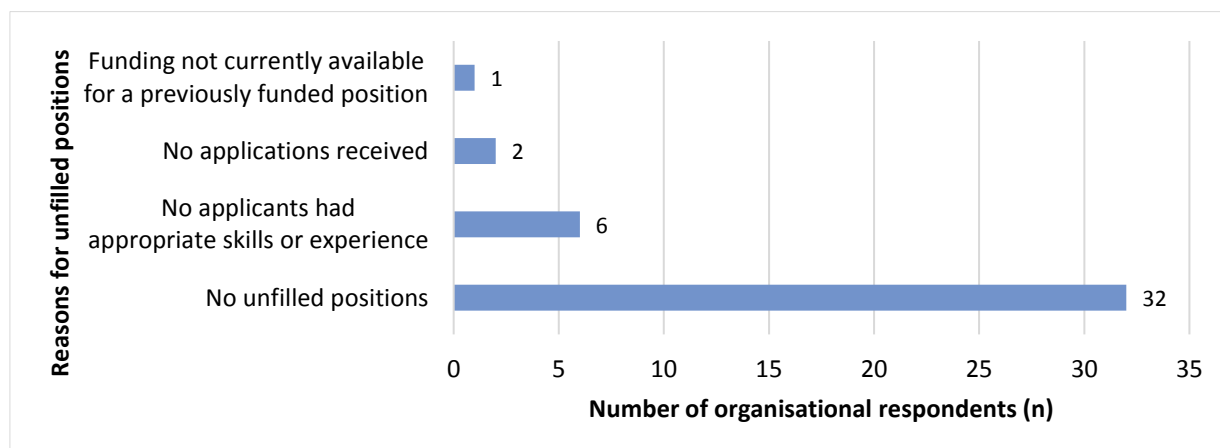
The data indicates that there is more likely an oversupply than an undersupply of audiologists to fill available positions. There is now a strong stream of new graduates and few unfilled positions. At the higher levels, however, the public sector finds it harder to attract professionals because they cannot pay as well as the private sector. It is also important to note that if extra audiology services are funded in line with the recommendations of the Parliamentary Inquiry, this situation could quickly change.

*“We can’t attract grade 2s because we can’t pay as much as private sector but we’re inundated with new grads.”*

**Unfilled positions**

Of the 40 organisational respondents to the AHWQ2 that employed audiologists, 32 (80%) indicated that they currently have no unfilled positions. Of the few that did report having unfilled positions, the main reason was that no applicants had appropriate skills or experience (Figure 14).

**Figure 14: Reasons for unfilled audiology profession positions (n=40) <sup>a</sup>**



<sup>a</sup> Respondents could select more than one response.

This data reflects what audiologists reported in qualitative research, namely that there were very few positions available, particularly for senior positions and metropolitan positions. A number of audiologists indicated that there was an oversupply of audiologists for the positions available. The message from audiologists is that there is a high level of community need for hearing services but not enough funding to pay for the positions needed. In some places patients were suffering due to the low equivalent full time (EFT) allowance allocated to audiology units.

*“[a barrier to career progression is] the sheer number of audiologists.”*

*“There are too many audiologists for the positions available.”*

*“Lack of senior audiology positions in public health sector - e.g. many hospitals do not employ audiologists or only in a limited capacity and under another discipline.”*

*“Insufficient EFT puts patient care and the organisation at huge risk. Inability to provide normal level of service to ensure appropriate patient care and the liability to organisation that could result is a huge concern.”*

## **Recruitment**

### **Number of applicants**

Organisational respondents to the AHWQ2 were asked about the size of the applicant pool for positions advertised at different grades in the preceding year. A high proportion of responding organisations had not advertised any positions.

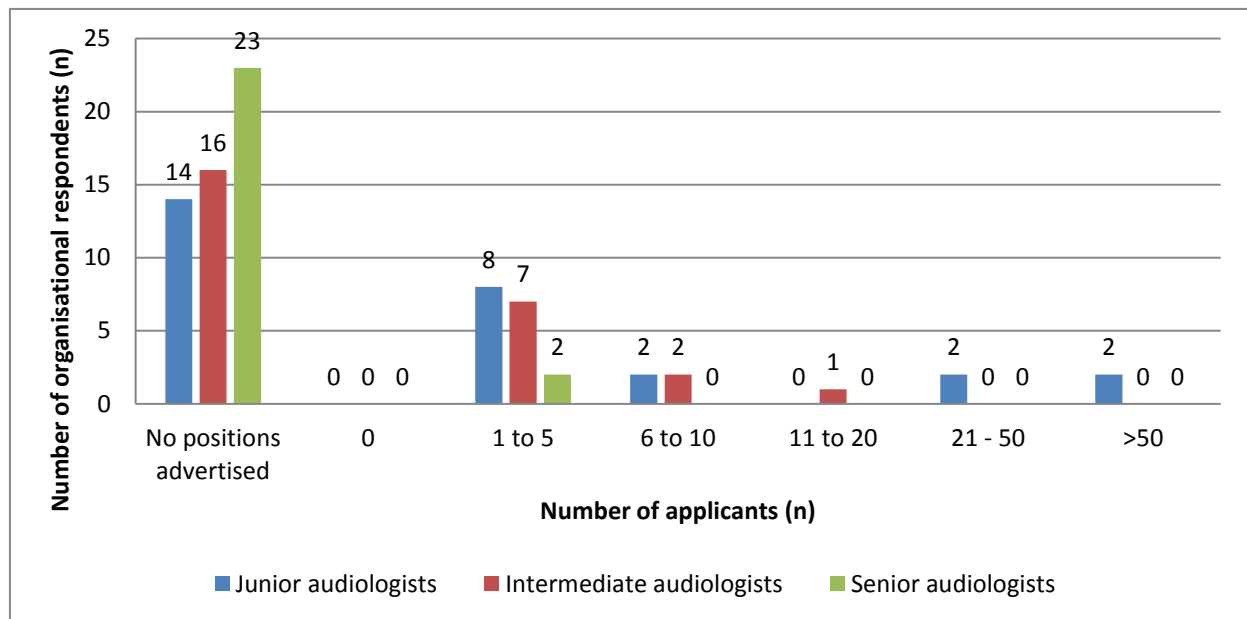
Of the 14 organisations that reported having advertised junior positions, only two received more than 50 applications. Most received one to five applications. Of interest regarding this issue was that 41% (n=48) of individual respondents indicated agreement with the statement that ‘there are too many new graduates in my profession’, even though the competition for jobs does not appear to be particularly strong based on the number applications received.

Only two organisations indicated they had unfilled positions at the senior level and only one advertised a position, but equally there were not many applications for these jobs (Figure 15). These findings are consistent with qualitative feedback from the survey and the focus groups which indicated that there are not many senior positions opening up.

*“Lack of senior positions available, overwork is the norm.”*

*“Not many opportunities for similar positions at a higher level.”*

**Figure 15: Number of applications received for positions advertised in the past year by level <sup>a</sup>**



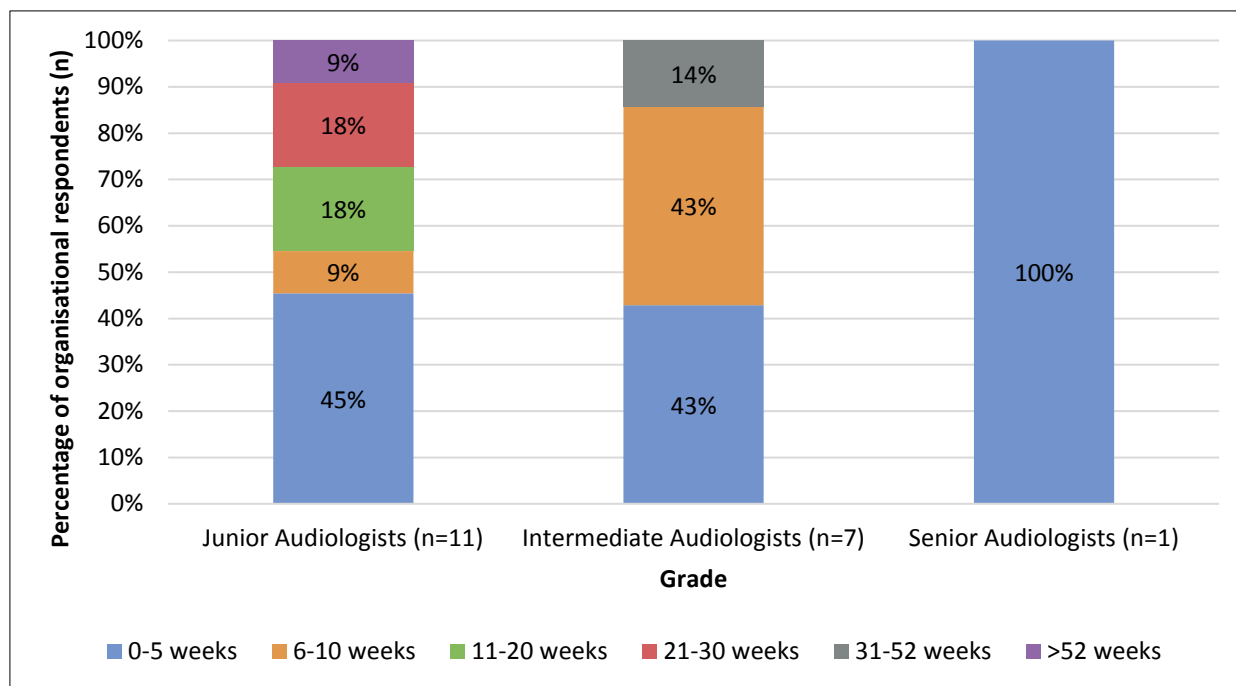
<sup>a</sup> Respondents could select more than one response.

**Time to recruit**

Of 29 AHWQ2 organisational respondents, only 11 advertised junior audiology positions in the preceding twelve months, and five of these filled the positions within five weeks. Only seven organisations advertised intermediate positions and one advertised for a senior position. These were also mostly filled fairly quickly (Figure 16).

Although this suggests that these positions are being filled with relative ease, qualitative responses suggested that experienced audiologists are sometimes replaced with junior level or new graduates when they went on extended leave.

**Figure 16: Time to fill vacancies (n=29) <sup>a</sup>**



<sup>a</sup> Although 29 organisations responded to this question, data is only included for organisations that indicated they had vacancies in the prior 12 months.

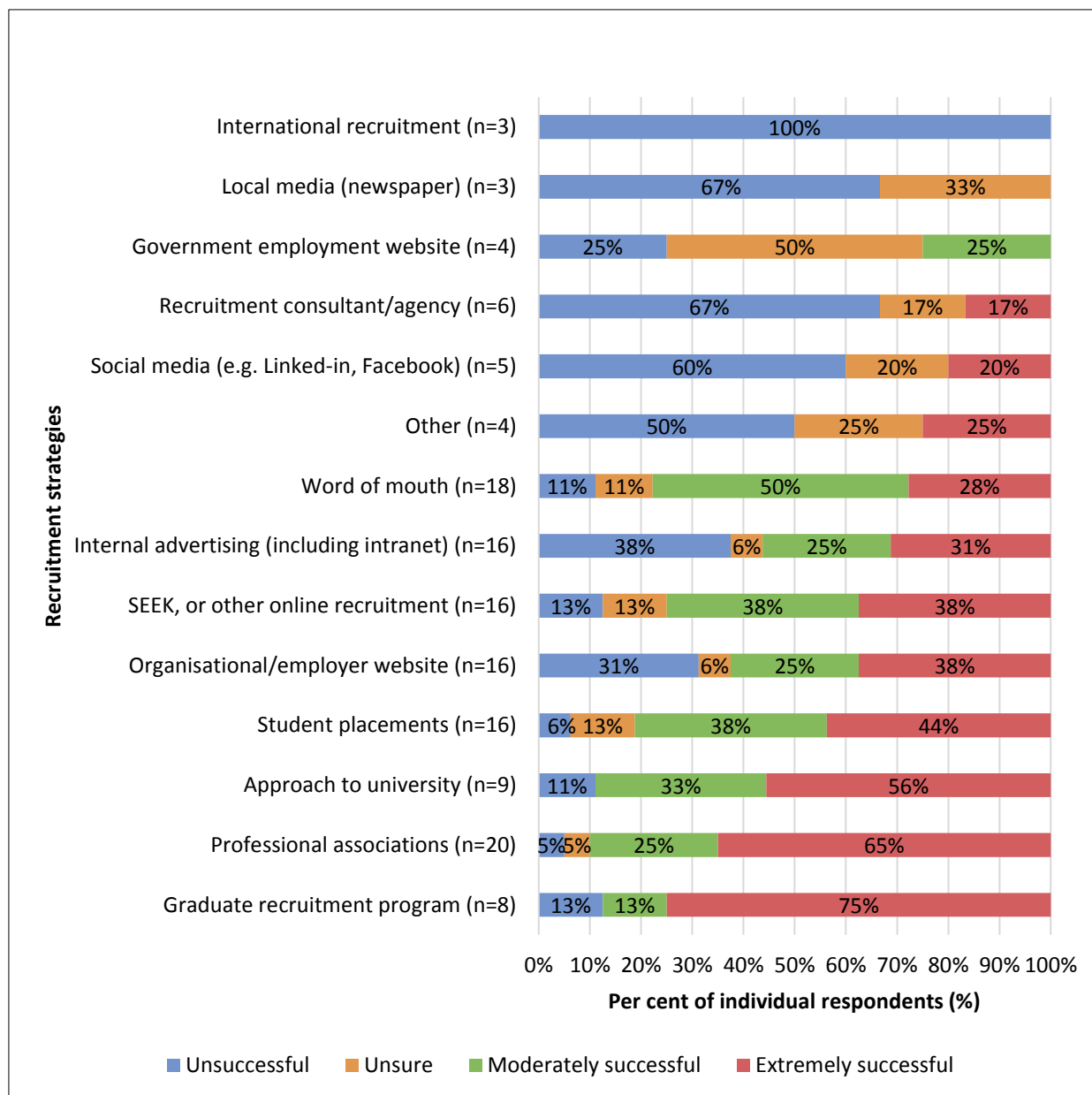
**Recruitment strategies**

Thirty six (36) organisational respondents answered the AHWQ2 questions relating to the different recruitment strategies they use. Advertising through professional associations and word of mouth were the strategies used by the greatest number of organisational respondents. Student placements, advertising through SEEK or other online recruitment firms, internal advertising and advertising through the organisation’s website were also commonly used approaches. Only a small proportion of organisations reported use of local media, international recruitment or government employment websites.

The only strategy which was identified as extremely successful by a large percentage of users (65%) was advertising through professional associations. Accessing graduates through approaches to universities, graduate recruitment programs and student placements were all also considered relatively successful.

Strategies reported to be unsuccessful by the greatest proportion of respondents was international recruitment, only three organisations used this strategy but all three reported no success,- as well as use of recruitment consultants (unsuccessful for four out of six of users), social media (unsuccessful for three out of five users) and, interestingly, internal advertising was not particularly successful (unsuccessful for six out of 16 users) (Figure 17).

**Figure 17: Successful strategies used to recruit audiologists (n=36) <sup>a</sup>**



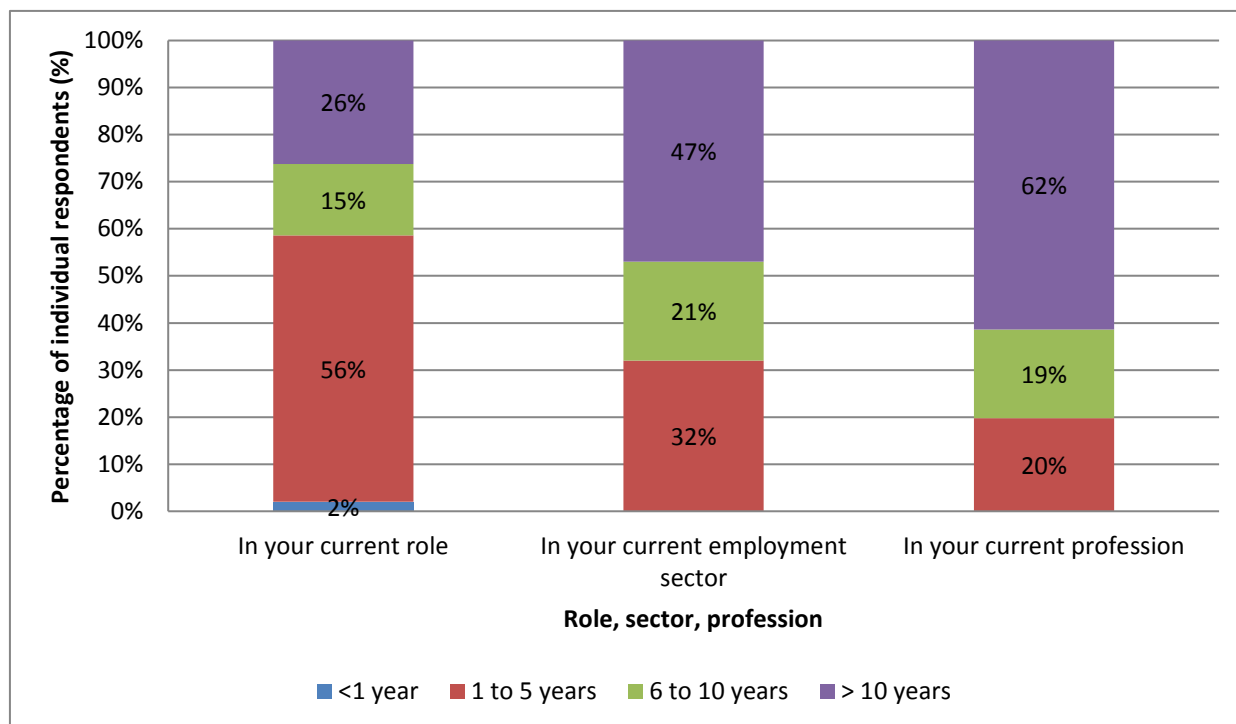
<sup>a</sup> Although 36 organisations responded to this question, for each recruitment strategy data is presented based on the number of organisations that reported that they used the strategy. For some strategies, such as international recruitment, a high proportion of respondents indicated they ‘do not use’ the strategy.

**Retention**

Audiologist respondents to the AHWQ2 were asked about their intention to remain in their current work situation. The majority (56%) indicated an intention to remain in their current role for one to five years with more than a quarter expecting to stay where they were for over 10 years. The results of the survey suggest a degree of stability within the profession, with only a fifth of respondents expecting to leave the profession within the next five years and nearly two thirds expecting to stay in the profession for more than ten years. Some of these people expect to change their sector of employment while remaining in the profession (Figure 18).



**Figure 18: Intention to stay in current role, sector and profession (n=117)**



Only two respondents indicated an intention to change their role within the next twelve months. One planned to move to a similar role in another organisation and one intended to undertake extended leave.

When asked about the reasons for changing roles, AHWQ2 respondents mentioned looking for a change, looking for better benefits, pay and job opportunities, maternity leave and relocation. However, the number of responses was too small to draw out any themes.

At an organisational level, 25 survey respondents indicated barriers to the recruitment and retention of audiologists. The most common reasons given were staff retention being affected by lack of career progression opportunities, low pay levels and other AH professions offering better pay and conditions (Figure 19).

From the qualitative findings audiologists indicated a concern with retention in the profession, particularly in rural and regional areas and particularly the retention of new graduates. Recruiting local people is seen as a good solution to this attrition. According to one respondent, clients enjoy seeing local people and benefit from the continuity of care.

Audiologists also echoed the concerns articulated in the survey that attrition in the profession is related to a lack of career progression opportunities, lack of diversity of roles and lack of support post-maternity leave.

*“(the single most important workforce issue is) the retention of graduates in regional areas.”*

*“There are opportunities in regional areas for graduates and then they leave and go back to the city.”*

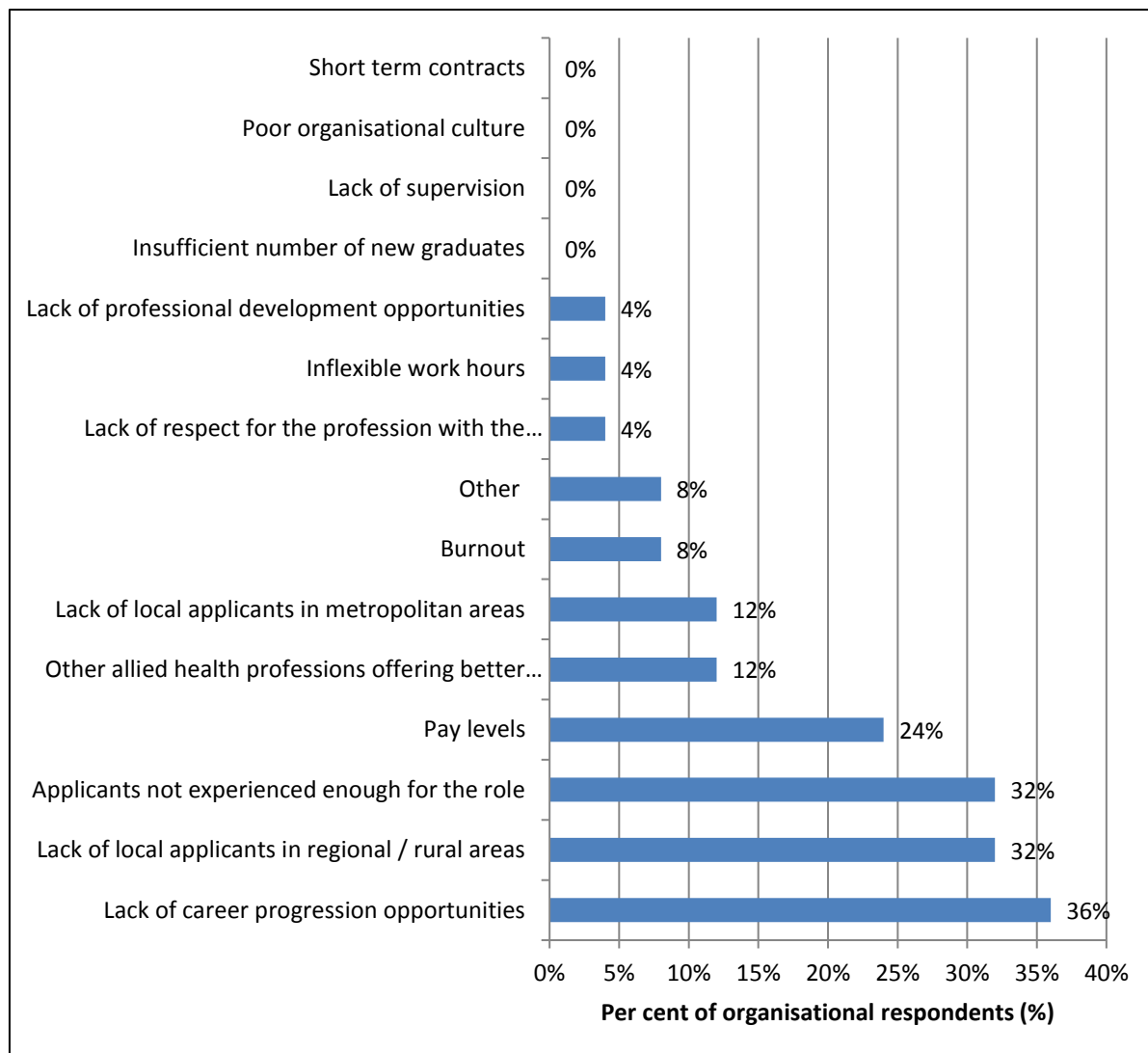
*“We’ve been lucky to be able to recruit local people. They’re more likely to stay. It’s really great for us. The clients we see love it when there’s a local person they are seeing. It’s nice when there’s that local touch.”*

*“Most people end up leaving the profession – it’s an average of 10 years. They go off and have kids, or go off and do other things. There’s not the variety of roles. As a physio you can do different specialities.”*

*In audiology, there's only diagnostic and rehab. The management roles aren't really there and there's not high turnover in that senior management level... no turnover."*

*"To retain them, they have to have permanent positions and career progression. If you've given us so many years, need capacity to go up. I'd rather have people who are competent and stay a long time than spend 18 months on a learning curve."*

**Figure 19: Employer reasons for recruitment and retention difficulties (n=25) <sup>a</sup>**



<sup>a</sup>Respondents could select more than one response.

## Organisation of the workforce

### Pay level

The median annual earnings for audiologists responding to the AHWQ2 were between \$70,000 and \$79,999. Nearly a quarter (22%) of audiologist respondents earned over \$100,000 a year while 15% earned less than \$50,000 (Figure 20). The average income for audiologists employed in the State public sector (about a third of Victorian audiologists) in 2016 was \$78,809 (VPSC, 2016). The median income for private sector audiologist respondents to the survey was \$80,000 to \$89,999, while the median income for public sector respondents was slightly lower at \$70,000 to \$79,999.

One in seven survey respondents expressed dissatisfaction with their current income. However, unlike most other Victorian AH professions, pay levels were not raised as a major issue by audiologists. The main concern in relation to salaries was the structure, rather than the level. Many audiology organisations structure salaries around incentives and sales-based commissions. These practices are generally seen as unethical and damaging to the reputation of the profession.

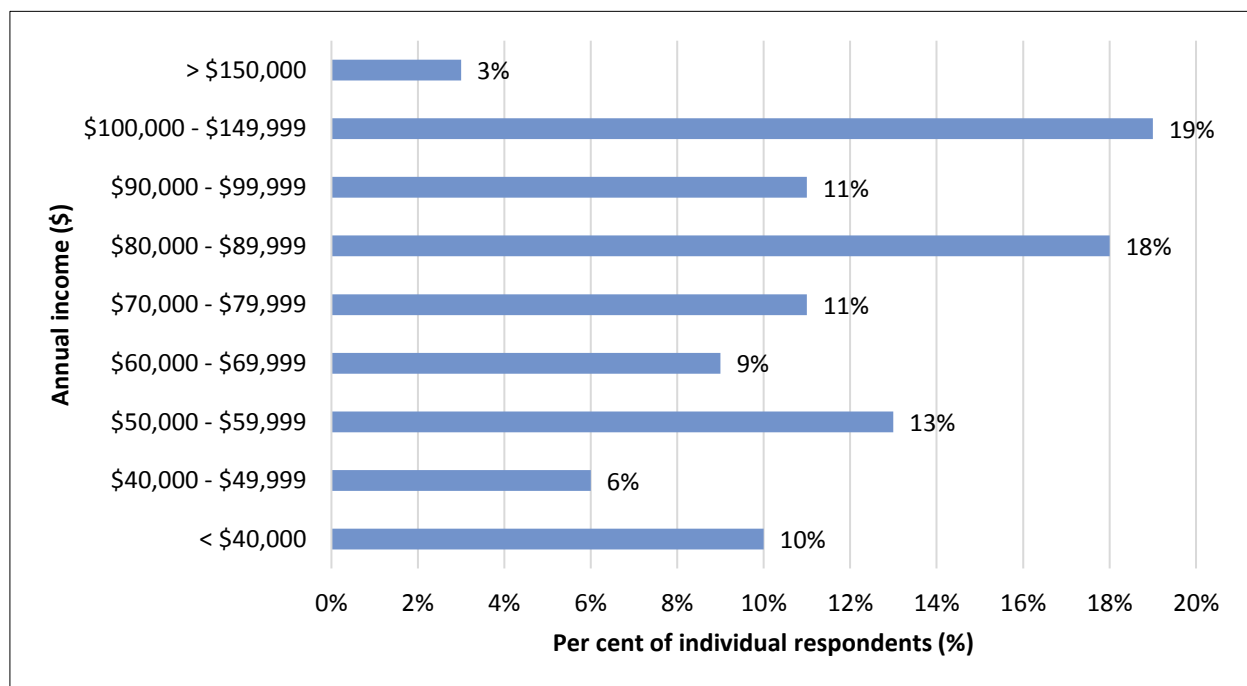
*“Reducing reliance on bonuses / incentive payments for some in the profession.”*

When asked whether their grade and or salary are appropriate to the work they do, 50% of respondents agreed and a further 24% were neutral. This reflects comments made by audiologists that they may work at a higher level for several years before a position becomes available and they can be appointed at that level.

*“I don’t think there’s an easy answer because funding is capped. Whilst we can’t pay them at a higher level we still stretch them to develop their skills.”*

When asked whether they were satisfied in their current work situation, those earning over \$100,000 were most satisfied, with over half being ‘extremely satisfied’ and the rest being ‘somewhat satisfied’. Most of those earning above \$80,000 were somewhat satisfied. Those earning less than \$50,000 were the least satisfied. There were very few – three out of 29 respondents - who said they were dissatisfied with their work situation. Interestingly, all nine of the respondents that earned less than \$40,000 a year were either extremely satisfied or somewhat satisfied. Presumably these respondents are working part-time and benefit from good work-life balance.

**Figure 20: Total annual income last year, before tax (n=109)**

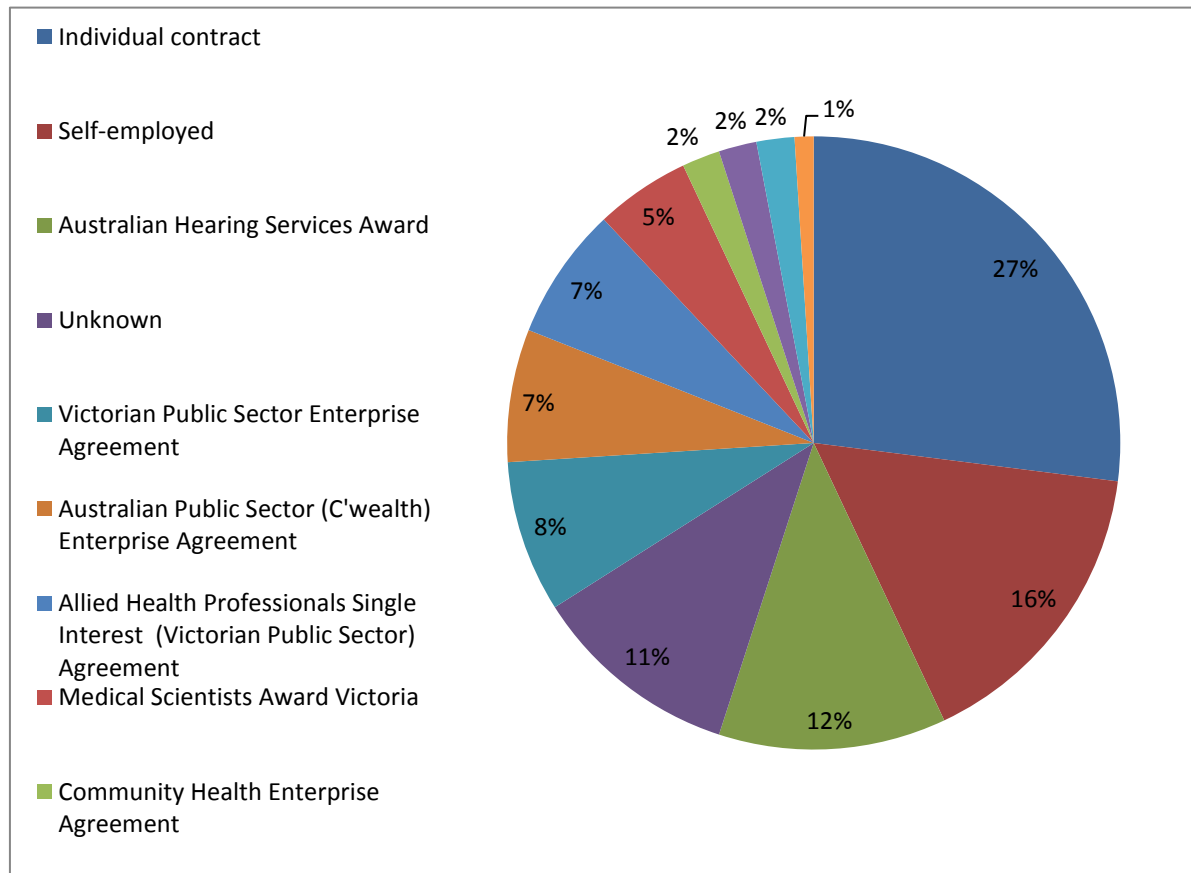


**Awards**

Audiologists were employed under a wide range of awards and pay agreements, the most common being an individual contract: This was the employment arrangement for 27% of AHWQ2 respondents. This is not surprising given the high level of private sector employees in the profession. Sixteen per cent (16%) of respondents were self-employed.

Eleven per cent (11%, n=14) of respondents did not know what award they were employed under (Figure 21).

**Figure 21: Current award or employment agreement (n=123)**

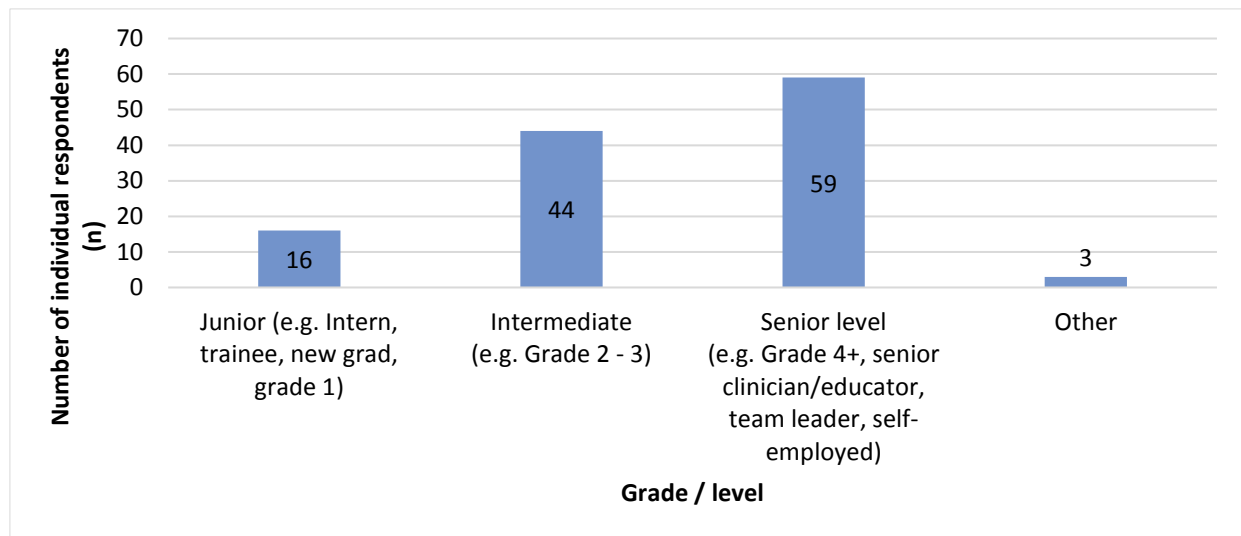


**Employment grade / level**

Nearly half of all AHWQ2 respondents (48%, n=59) reported being employed at the senior level (grade 4 or above, senior clinician/educator, team leader, self-employed). A high proportion of respondents (36%, n=44) were also employed at the intermediate level (grade 2-3) and fewer at the junior level (13%, n=16). This pattern is different from most other AH professions which tend to have the highest proportion of professionals employed at the grade 2 levels (Figure 22). One respondent to the survey was employed in academia.

From the data available, it is not possible to ascertain whether these proportions are representative of the Victorian audiology profession workforce or whether the survey received a disproportionate number of senior level respondents.

**Figure 22: Current grade (n=122)**



**Employment status**

The vast majority of audiologists responding to the AHWQ2 indicated they were currently employed in permanent roles (88%, n=91) (Table 5).

**Table 5: Nature of employment with current main employer (n=104)**

Employment status	%	Count
Permanent	88	91
Temporary	1	1
Contract	7	7
Casual	4	4
Voluntary	0	0
Other	1	1
<b>Total</b>	<b>101%<sup>a</sup></b>	<b>104</b>

<sup>a</sup>Due to rounding

**Number of employers**

The majority of audiologists (67%, n=83) had just one employer, just under a fifth (19%, n=22) had two or more employers, and 15% (n=19) were fully self-employed (Table 6).

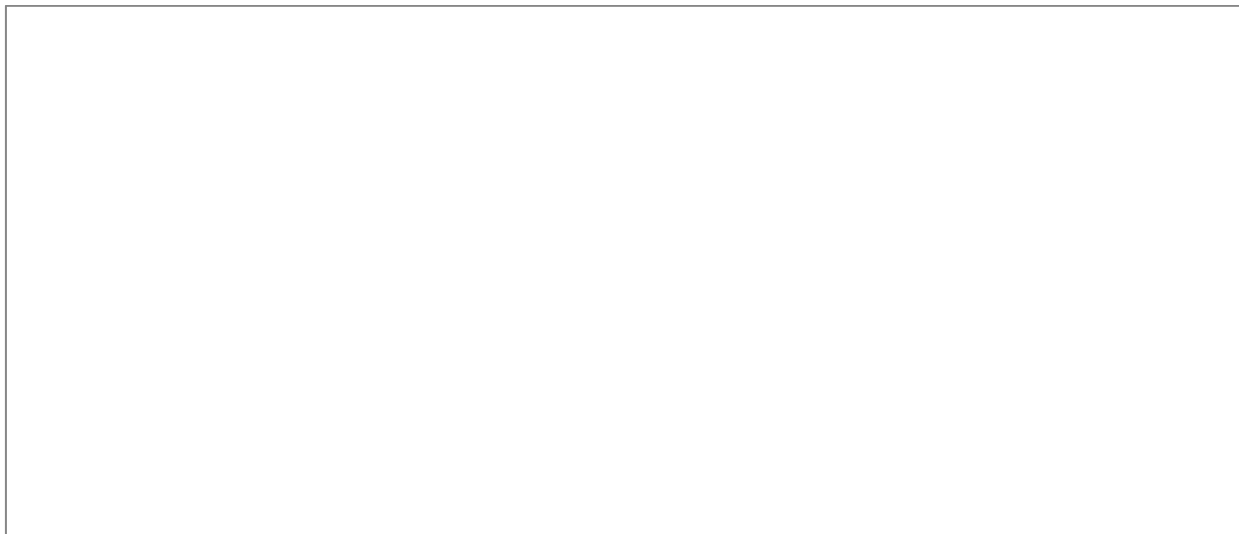
**Table 6: Current number of employers (n=124)**

Number of employers	%	Count
1	67	83
2	14	17
3	2	2
4	<1	1
5 or more	2	2
I am fully self-employed	15	19
<b>Total</b>	<b>100</b>	<b>406</b>

### Hours of work

On average, audiology respondents reported working 34 hours per week in their main role (n=123), with a range of one to 67 hours worked per week. The largest number of respondents (n=16) worked 40 hours per week, 55 (45%) worked between 32 and 40 hours per week, and 17% (n=21) worked more than 40 hours per week (Figure 23). The average total hours of paid work may be a little higher than this as 19% (n=22) of respondents reported being employed by more than one employer (Table 6).

**Figure 23: Number of hours worked per week (n=123)**



Most audiology AHWQ2 respondents indicated they perform their duties on weekdays, mostly during the day (91%, n=118). A small proportion indicated they worked on Saturdays (3%), Sundays (3%), at night-time (2%) and in shifts that change from day to day, or week to week (1%) (Table 7).

Public audiologist participants in the qualitative research indicated that they were able to achieve work-life balance in their roles and only rarely required to do overtime.

*“I have to stay back sometimes. Its swings and roundabouts but never in staff’s favour. But in general, I can get home within an hour of finishing – its ok.”*

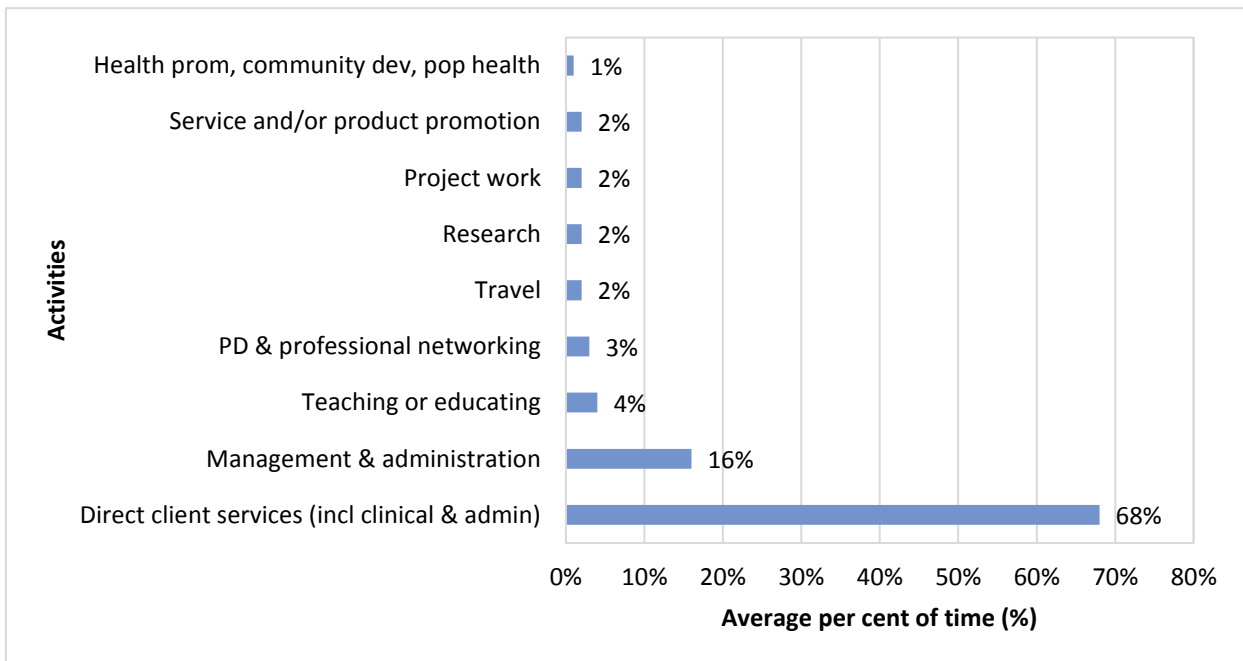
**Table 7: Working pattern during a normal working week (n=129)**

Working pattern	%	Count
Monday to Friday (mostly day time)	91	118
Monday to Friday (mostly night time)	2	2
Saturday	3	4
Sunday	3	4
Shifts that change from day to day, or week to week	1	1
<b>Total</b>	<b>100</b>	<b>129</b>

**Roles**

On average, AHWQ2 respondents spent over two thirds of their time (68%, n=119) on direct client services (including clinical and administrative support and clinical supervision). An average 16% of time was spent on management and administration, including attending meetings. When averaged across the audiology workforce, teaching, research, project work, professional development, health promotion, product promotion and travel accounted for only a small proportion of time (Figure 24).

**Figure 24: Average per cent of time spent on work activities (n=119)**



## Scope of practice

### Prevention and early intervention

Audiologists feel there is a lack of awareness of the benefits of prevention and early intervention in hearing loss. GPs, in particular, need more education about the important role of audiologists in this area.

*Even childhood hearing loss – temporary assistance – GPs are not aware of that.*

*We talk (with people in the community) about the comorbidities associated with hearing, for example, diabetes, dementia, cardiovascular – compounding an already complex issue*

The need for more early intervention services was a strong theme in the Parliamentary Inquiry. Despite Australia being a world leader in the provision of hearing services to children, numerous submissions referred to the need for improvements, particularly for rural and remote patients. The report noted importance of early intervention services in supporting the development of children with hearing impairments, and the need to ensure all children with hearing impairments have access to these services to support lifelong educational, social and employment success. It also acknowledged that there were issues for families in accessing and navigating early intervention services. The report recommends a national guided pathway service be established to assist parents in choosing early intervention services. It also recommends automatic referral to a paediatric audiologist, which can be bulk billed, following identification of a hearing impairment at a school screening program. These measures will enhance the provision of early intervention audiology services for children.

Prevention was also a strong theme in the Inquiry, with recommendations to fund a national hearing loss prevention and treatment program for agricultural communities, and a national education and awareness campaign on national hearing health. These initiatives will be welcomed by the research participants who would like to see greater awareness in the community about hearing health and the audiologists' role in promoting it.

### Advanced practice

The Department of Health and Human Services defines advanced practice roles as:

*Work that is currently within the recognised scope for a profession, but through custom and practice are performed by other professions.*

They recognise one advanced role for audiologists: Advanced audiology-led clinics to further assist in managing ENT demand. When asked whether audiologists had participated in this, 18% (n=22) of respondents said they had.

AA's scope of practice document, *How to determine the scope of your own practice*, indicates that in certain settings and contexts audiologists may perform, or assist in, tasks beyond those described in the scope of practice. Examples of settings and contexts where extended scopes of practice may be more common include:

- in rural and remote settings;
- in emergency settings; and / or
- when performing tasks on behalf of another health professional, such as an ENT surgeon (AA, 2017).

AA has not specifically defined these areas of extended scope but supports its members to extend the scope of their own practice, as long as they do so lawfully, safely and effectively. They have developed a 'Decision Tool' to help audiologists determine if they should be engaging in tasks that would be considered extended scope of practice. AA recommends that, "in addition to self-reflection using the Decision Tool, audiologists should discuss extending the scope of practice with their employer (if any), peers and their legal advisor."



Audiologists identified a number of other activities that could be relevant advanced roles for audiologists who have the appropriate training. Wax removal was by far the most commonly identified activity.

Other activities included:

- Neonatal diagnostic testing
- Assisting and instructing GPs
- Indigenous audiology
- Newborn and paediatric testing, management and rehabilitation
- Prescribing for otitis media
- Vestibular assessment and rehabilitation
- Tinnitus
- Cochlear implant mapping and rehabilitation
- Counselling
- Neurology for nerve damage
- Teleotology

Audiologists in focus groups said they would like to have credentialing for advanced scope so that people could specialise and there would be some consistency around how advanced practice occurs.

*“If I look at physio, you can specialise in different skills – physios have all done a PhD in vestibular physio. In audiology, you don’t have to do that. Its dependent on the employer how they credential staff, define scope and check competency – it’s very variable.”*

*“We’re a long way behind other professions in terms of credentialing and competencies – it’s still in the development stage.”*

### **Allied health assistants (AHA)**

Three-quarters (76%) of audiology respondents stated they do not delegate roles to AHAs, audiometrists or other practitioners. Nine percent (9%) delegate to AHAs, 7% delegate to audiometrists and 7% delegate to other practitioners including speech therapists, students and clinical assistants.

One interview respondent said her organisation preferred to use clinical assistants to AHAs. Clinical assistants are trained in a specific, technical role and can assist with testing and repairs to hearing aids.

*“Clinical assistants, not AHAs, are trained to assist at appointments. They will go over management of device with client and are trained to do minor repairs on hearing aids and sometimes review management of aids or bit of triaging. There’s a lot of issues we can work on at the counter.”*

### **Telehealth**

Despite its potential in audiology, only a few audiology respondents use telehealth or other forms of technology for remote or virtual service delivery. Use of telehealth was only reported by 15% (n=18) audiologists mostly to deliver services to people in regional and remote locations and also to provide easier access to services for some balance patients. The modes of telehealth described by respondents included tele-audiology and online / Skype meetings.

The clinical purposes for which telehealth was reported to be used included:

- Remote hearing aids programming
- Sending audiograms and pictures to ENTs from remote Aboriginal communities
- Tele-audiology for remote clients
- Telehealth between hospitals

- Supervision of audiologists
- Medical management of balance patients
- Clinical services when short staffed

Audiologists also reported using telehealth for non-clinical purposes including meetings, delivering and receiving professional and clinical supervision, and providing and accessing education.

Those that do use telehealth have seen great benefits, without a compromise in quality, for patients who live in 'hard to staff' areas.

*"We did an unplanned leave trial when audiologist called in sick. We connected an audiologist elsewhere with a local clinical assistant. We followed up later with the clients that participated. They liked that their appointment didn't have to get cancelled, that they had two people dealing with them and that it didn't compromise quality of service. It's great in hard to staff areas."*

Audiologists in interviews and focus groups indicated that there was much more potential to use telehealth in the profession, and that this would benefit regional patients enormously. Due to the expense involved in setting up audiology booths, in many cases telehealth may provide a viable alternative to decentralised services.

*"We're not good at using technology to deal with remote patients. Every patient in Victoria travels to East Melbourne for their care – sometimes weekly. Whereas a lot could be done through telehealth so patients don't always have to travel."*

*"You could still see complex clients and do diagnostic testing with support over telehealth... I feel like that's probably going to be a bit thing in audiology going forward."*

*"Unless a centre already has an audiology booth in place, we can't go there because it's too expensive to set up. We can pay for staffing but not equipment costs."*

The Parliamentary Inquiry into the Hearing Health and Wellbeing of Australia (2017) has recommended that the Australian Government add hearing health services delivered via the internet to the Medicare Benefits Schedule. Implementing this recommendation would see audiologists delivering services more routinely by telehealth.

## **Workforce movement**

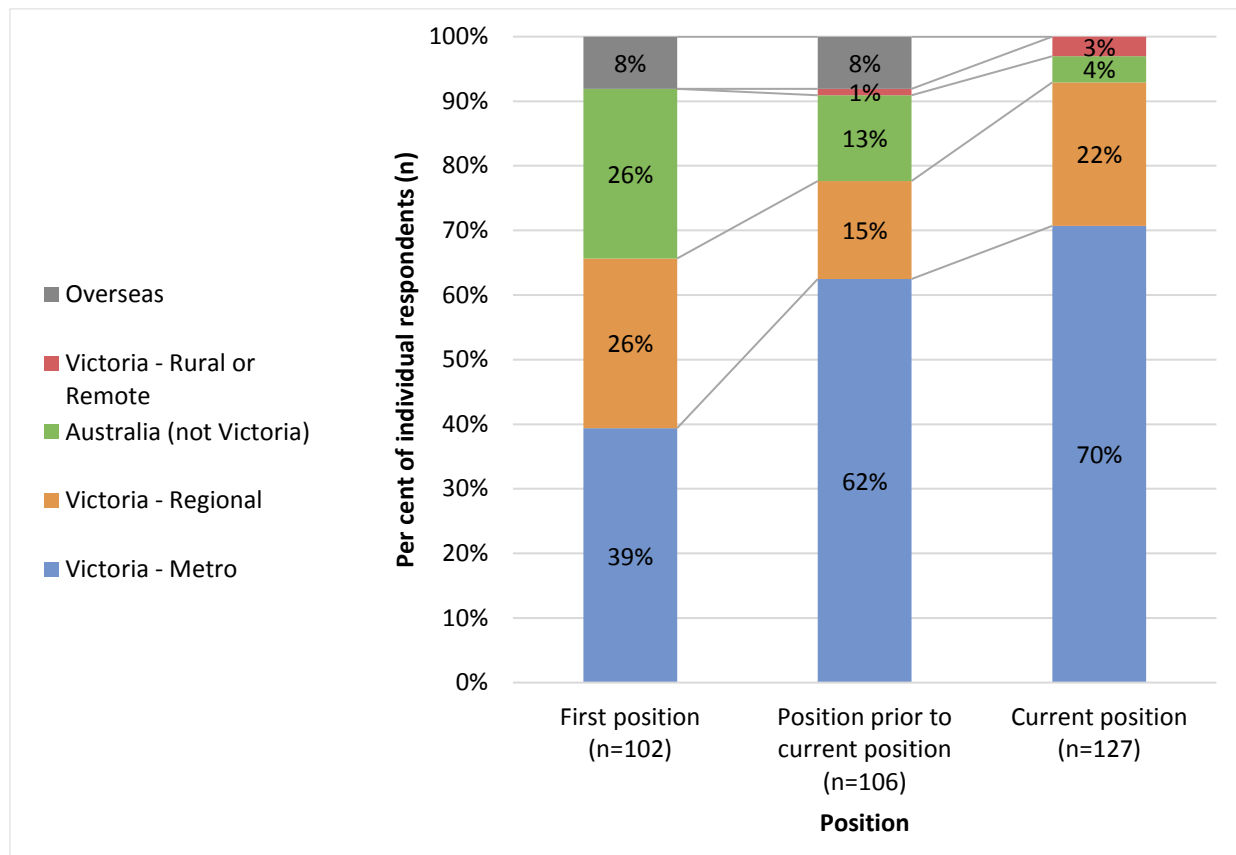
To identify patterns in the career pathway of audiologists, participants were asked to provide details regarding their first position, their position prior to their current position, and their current position. Questions focussed on position locations, roles, settings, and sectors. They were also asked about the number of years they had worked in each role. The results are presented as percentages as not all respondents had worked in three roles. The numbers of respondents for each position and each question are presented in the relevant figures, which illustrate the broad trends across respondents' careers to date.

### **Changes in location**

The AHWQ2 data shows that the proportion of respondents working in metropolitan areas increased from 39% to 70% between an individual's first role and their current role (Figure 25).

Respondent employment decreased slightly in regional areas from 26% to 22% between respondents' first positions and their current position at the time of the survey. A number of respondents were employed overseas in earlier positions.

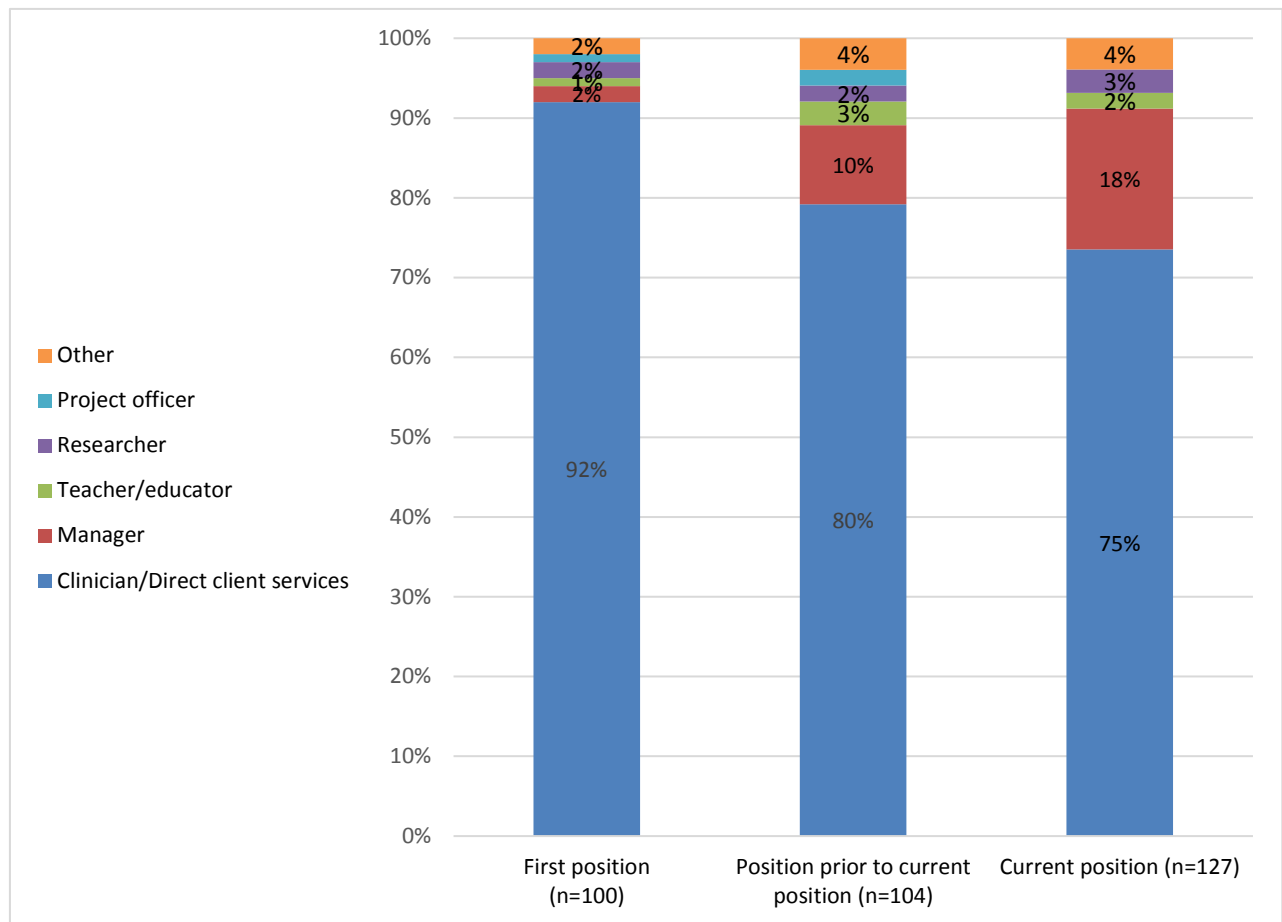
**Figure 25: Changes in location (n=102-127)**



**Changes in role**

When employed in their first role as an audiologist, 92% (n=100) were employed in roles as clinicians / direct client services. This proportion shifted to 80% (n=83) for respondents' immediate prior position, with 10% (n=10) of respondents being employed in management positions. This figure decreased further to 75% (n=95) for respondents' current position. A few audiologists indicated they had moved into research or teaching positions (Figure 26).

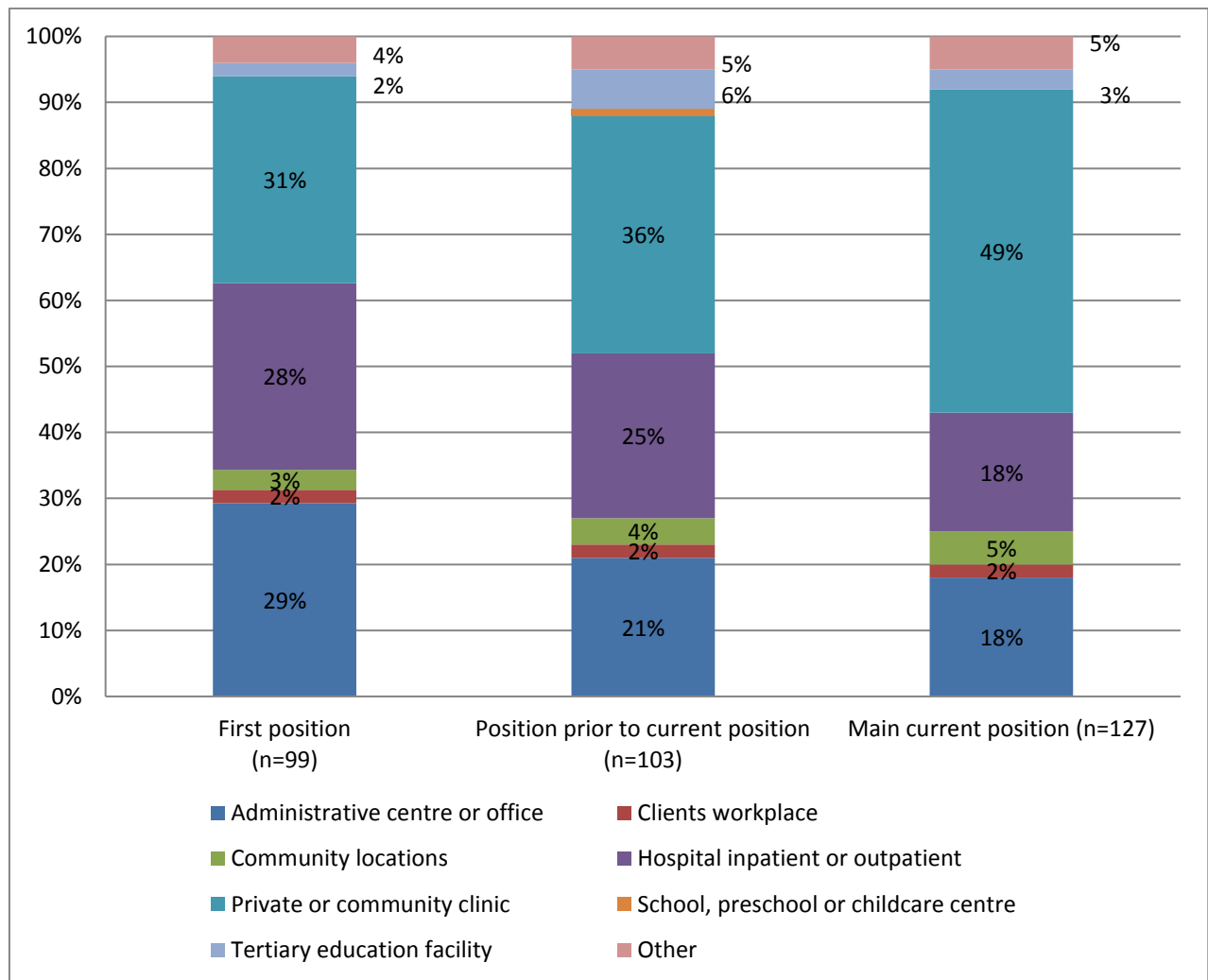
**Figure 26: Changes in role (n=100 – 127)**



**Changes in setting**

Figure 27 shows noteworthy changes in the work setting of audiologists across their first position, their position prior to their current position, and their current positions. Respondents’ first roles were predominantly in private clinics (31%), hospitals (29%) or administrative centres (28%). Over time the number of audiologists working in private clinics increased to almost half of all respondents while the number working in administrative centres and hospitals reduced.

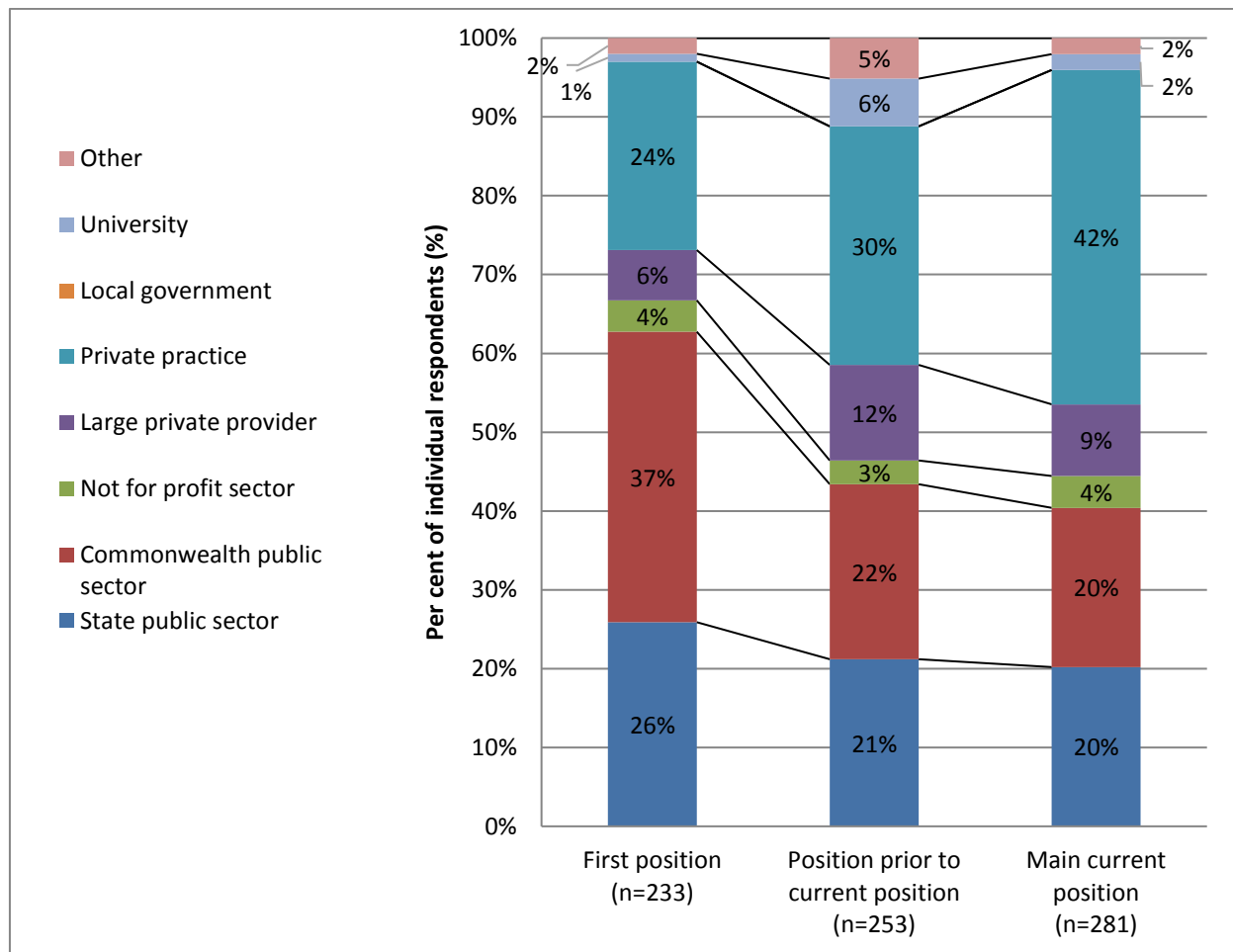
**Figure 27: Changes in setting of care (n=99 – 127)**



**Changes in sector**

This data indicates that, over time, audiologists tended to move away from the Commonwealth public sector roles and State public sector roles towards private practice. Only 24% of respondents had their first role in private practice, while 42% of respondents have their current role in private practice. Sixty-two percent (62%) of respondents began their careers in the public sector, but only 40% are still working in the public sector (Figure 28)

**Figure 28: Changes in sector (n=99 – 127)**



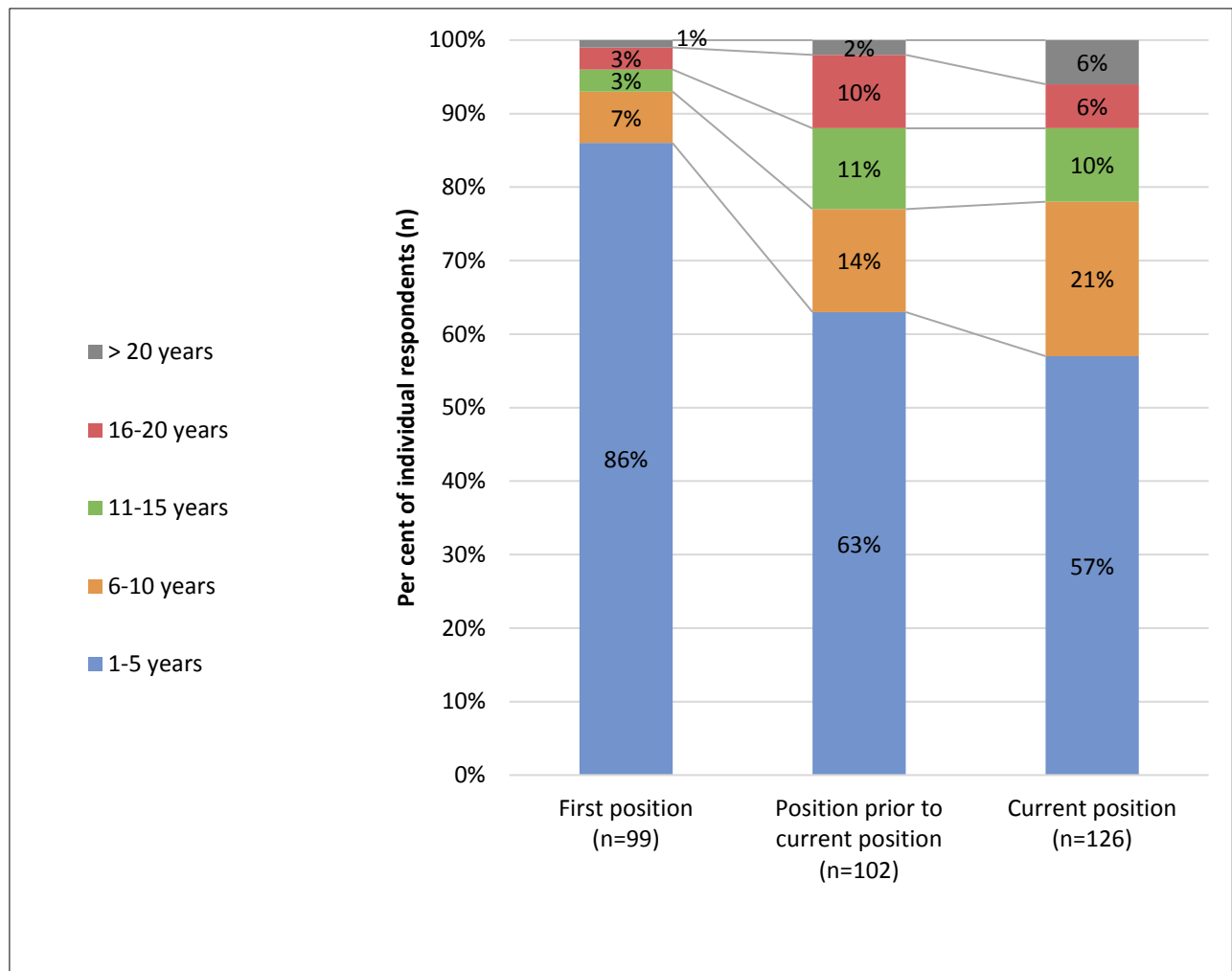
Additional information relating to changes in employment location is in Appendix Table 3.

### Years in role

Over time, the number of years that respondents work in a role was shown to increase. Eighty-six per cent (86%) of audiology professionals worked in their first role for five years or less and over 60% of these worked in their first role for two years or less. These numbers decreased to 57% and less than a quarter for their current role. One in eight respondents (12%) had worked in their current position for 16 years or more (Figure 29 and Table 8).

There is not a lot of difference between sectors; however the Victorian public sector had the longest serving employees. Forty-four per cent (44%) of Victorian public sector employees had worked in their current position for more than six years, while the proportion for private practice was 41% and for Australian public sector it was 35%.

**Figure 29: Years in each role over the career path (n=99-126)**



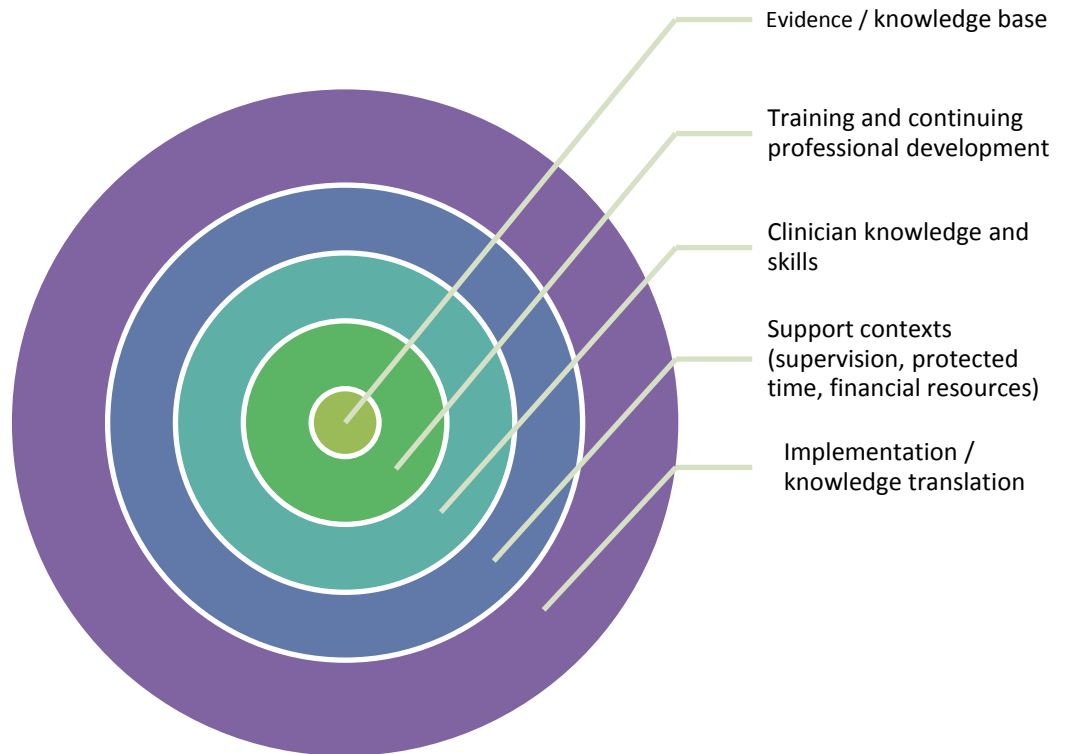
**Table 8: Years in each role over the career path**

	Mean	Range	Count
Years in current role	4	0 - >25	126
Years in prior role	5	0 - >25	102
Years in first role	3	0 - >25	99

## Capability

Capability refers to the strength of the evidence underpinning relevant audiology profession activities, access to training and continuing professional development (CPD) to develop the appropriate skills, the standard of skills practitioners have to deliver evidence-based services, the contextual supports available (supervision, mentoring, dedicated time and appropriate funding models), and opportunities for change in practice to occur (i.e. knowledge translation and implementation) (Figure 30).

**Figure 30: Workforce capability framework**





## Key findings

- The opportunity to do research was not rated highly amongst audiologists in terms of its importance to employment choices. Nevertheless, a number of audiologists expressed a desire to be supported to do more research
- The majority of respondents (84%) hold a post-graduate qualification in audiology; most began practising after they achieved a master's degree (52%).
- Almost all respondents (97%) were confident they have the skills to do their jobs. Nevertheless, employers identified some clinical skill gaps. Non-clinical skill gaps were most often identified by both employers and audiologists including communication (with patients and other professionals); governance, quality and leadership.
- Nearly three quarters of respondents agreed they had access to adequate training to progress their career (66%). However, a number of respondents found the cost of training a barrier and did not get enough employer support for CPD.
- Poor opportunities for career progression were a strong and recurring theme. Senior roles are scarce and career pathways are not clear. For many, starting a family limited their career progression.
- Key facilitators of career progression were reported to be supportive managers and colleagues, ethical mentors, training and CPD, self-drive, passion, work ethic and other personal attributes as well as being prepared to work in regional locations
- The most common work arrangement of most participants was working in collaboration with other professionals but not being co-located with them (34%), followed by working with and being co-located with a multidisciplinary team in a formal team structure (22%).
- Sixty-seven (67%) of respondents reported having a clinical supervisor. In most instances supervisors were audiologists (61%).

## Evidence / knowledge base

Technology is having a significant impact on the audiology profession. Audiologist respondents explained that the equipment and tests are constantly evolving and it is incumbent upon professionals to keep up with the research to implement the latest developments in science and medicine.

Some respondents wanted their employers to support them to do more research. However, the opportunity to do research was not rated highly in terms of employment choices (considered very important by 11% and unimportant by 57%): this implies there is not a strong research culture in the profession.

*“Definitely huge research into developing hearing aids, implantable devices, testing for balance and hearing – we’re constantly looking at new problems with patients. A lot of this is because everything is improving – finding new things. Technology can help us see things we couldn’t see before. The profession is very driven by technology – some of it is private enterprises trying to vie for this and that. A lot of changes in medicine are flicking in to us.”*

*“There’s always room for more but a lot of what we do is implementing the latest and greatest thing. It’s the nature of the job. Patient management stays the same but platforms improving all time.”*

*“The profession, even in the public sector does not support clinicians who want to do some research as well.”*

*“I suspect all staff will want to do research but I do need them to provide clinical service delivery first and foremost.”*

## Training and continuing professional development

### Prior work experience

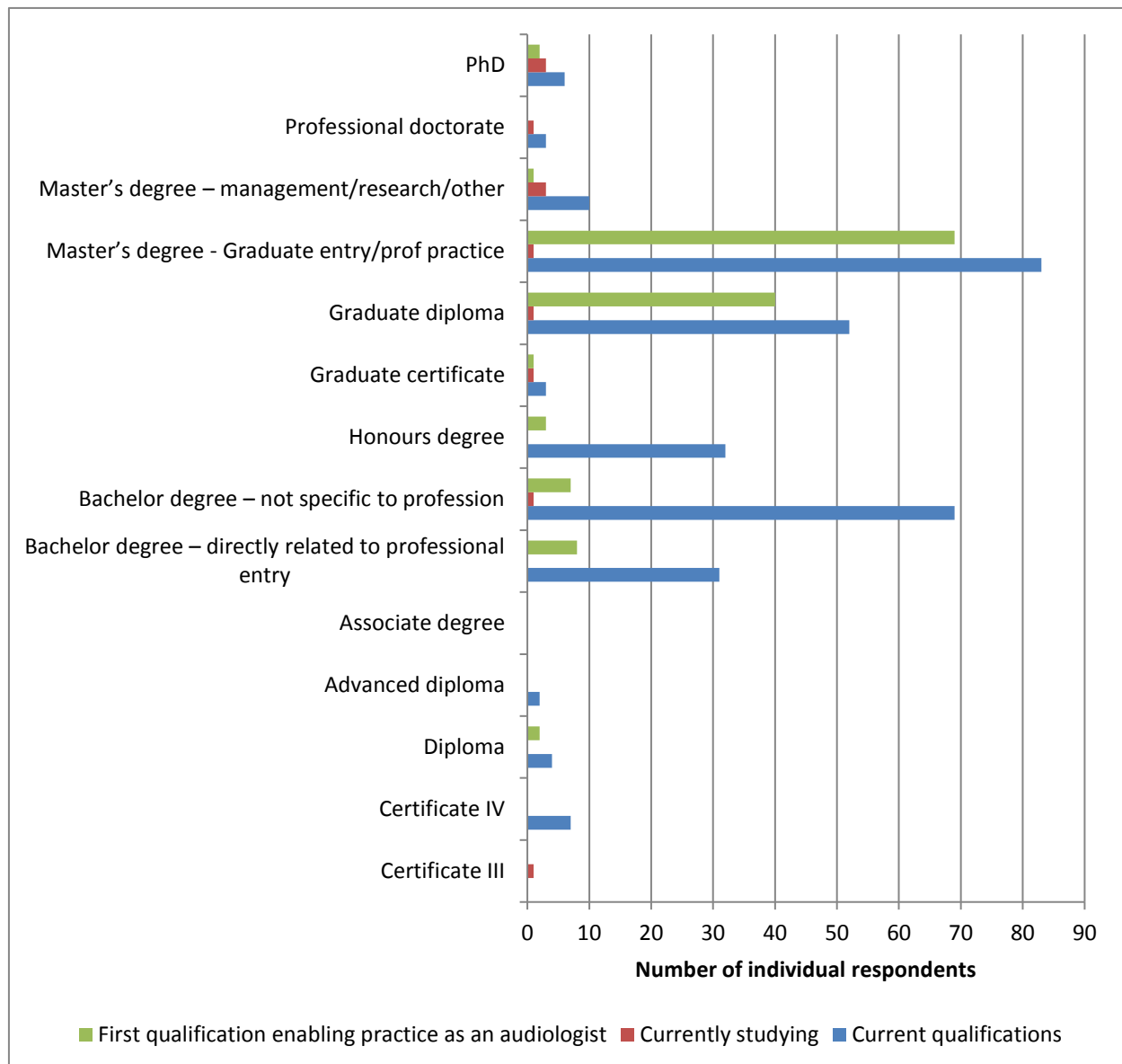
The majority of respondents (69%, n = 87/127) had no prior profession or role before becoming qualified as an audiologist. The remaining respondents (31%, n=40) had worked in another profession or role full-time for more than 6 months before entering audiology, with almost half having worked in a health related profession (42%, n=17). For those that had worked in another role or profession, the average number of years worked was six.

### Qualifications

The predominant first qualification that enabled respondents to practise as an audiologist was a master's degree (52%). A further 30% entered the profession with a graduate diploma (Figure 31). It is a requirement to have a master's degree to practise as an *Audiology Australia Accredited Audiologist*.

Respondents also reported having a range of post-graduate qualifications including graduate diplomas (n=52), clinical masters (n=83), management masters (n=27), research masters (n=44), professional doctorates (n=3), and PhD (n=6). A further 12 respondents reported that they were currently undertaking post-graduate studies at a mix of qualification levels. Four respondents were undertaking PhDs or professional doctorates. See Figure 31 and Appendix Table 4 for detailed breakdown by respondent numbers to different qualifications.

**Figure 31: Qualifications held or currently studying (n=133)**

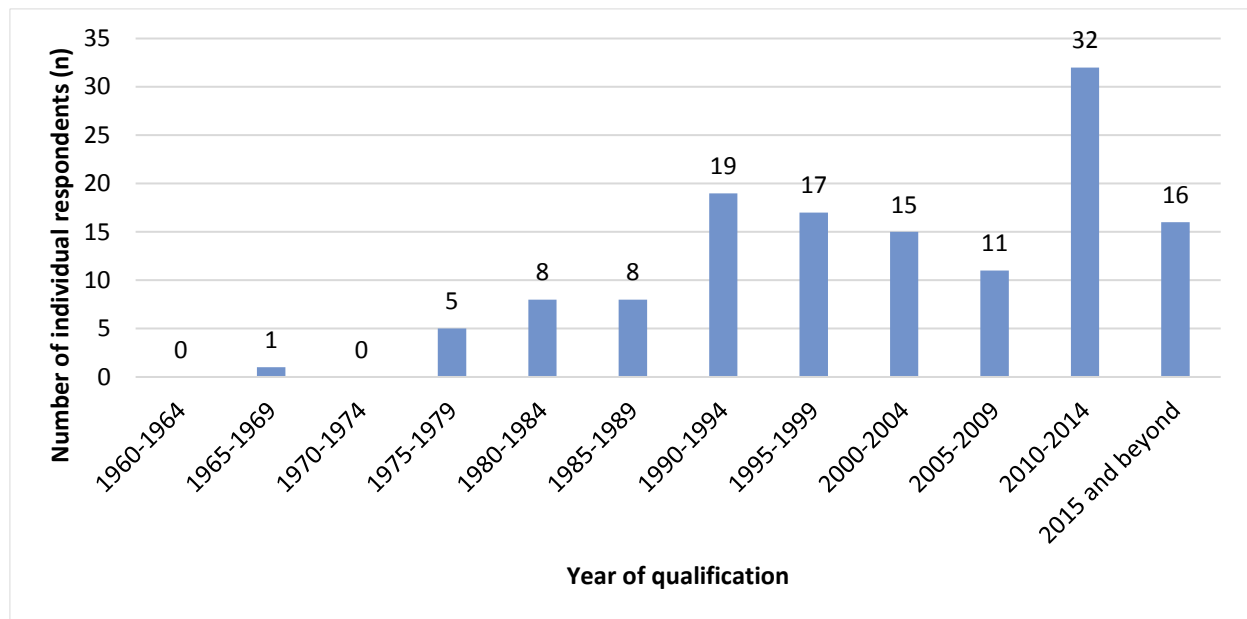


<sup>a</sup> Respondents could select more than one response for 'currently studying' and 'current qualifications'

When considering the total respondent cohort, the mean length of time since completing their first qualification was 16 years.

Over one third of respondents (36%) received their audiology profession qualification in 2010 or later (Figure 32), with the highest number of respondents graduating between 2010 and 2014.

**Figure 32: Year of qualification (n=133)**



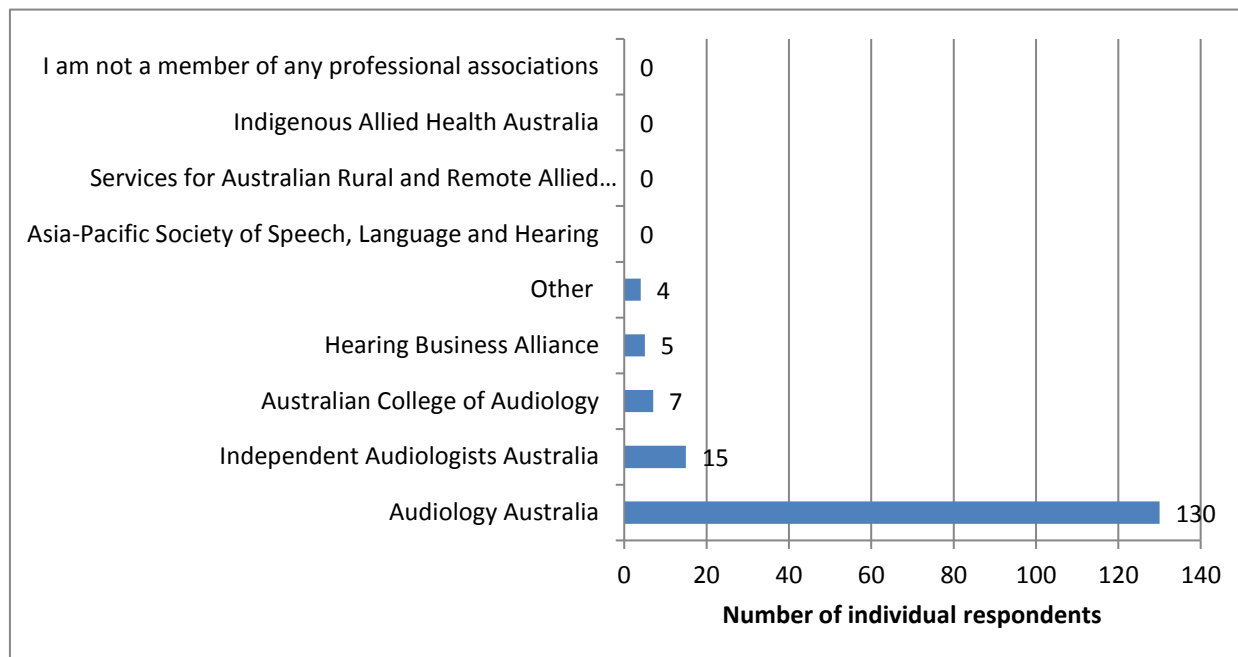
Three quarters of respondents qualified to practise as an audiologist in Victoria (75%, n=100), and 14% gained their qualification from another Australian state, predominantly New South Wales or South Australia. The vast majority of respondents trained in a metropolitan area (99%). Overseas trained audiologists accounted for 11% of respondents (Appendix Table 5).

### **Continuing professional development**

Audiologists were asked about their participation in continuing education, whether they belonged to professional associations and societies, and if they felt they had adequate access to professional development and training.

The vast majority of AHWQ2 respondents were members of AA (98%, n= 130/133). Other professional associations/organisations which respondents were members of included: Independent Audiologists Australia (12%, n=15/130), Australian College of Audiology (5%, n=7/130) and the Hearing Business Alliance (4%, n=5/130). A small number of individuals belonged to audiology associations in other countries. No respondents indicated that they did not belong to any professional association or society (Figure 33).

**Figure 33: Professional associations and societies audiologists belong to (n=133)**



Nearly three quarters of respondents agreed they had access to adequate training to progress their career (66%, n=76) (Figure 34). However, a number of respondents found the cost of training a barrier and did not get employer support for CPD. An issue was financing not just the training but also accommodation and flights where necessary. As a small profession, CPD opportunities are not always locally based. Regional audiologists have found CPD opportunities have improved with the regular availability of webinars.

*“Financial support for attendance at conferences needs to be improved. Audiology is a small profession and in order to obtain CPD we often have to fly interstate and pay for flights and hotels as well as registrations. There is not enough of us in any state to gather all our CPD locally.”*

*“We do encourage people to attend conferences but don’t get much support for that – we only pay registration for one conference. For us to get all our points we need to fly interstate and pay for airfares and accommodation. You spend up to \$2000 a year of your own money. Paying towards that it would be good.”*

*“Living regionally, there can be some issues with opportunities. It’s hard to get to CPD opportunities in the city but AA have created a lot of online webinars that have made a big difference. It used to be a big disadvantage to access quality CPD but now it’s much better.”*

Several respondents indicated that there was a lack of support for training in non-technical skills, particularly leadership or management training which would help clinicians progress in their careers.

*“We need access to leadership, management training through the organisation.”*

*“(A barrier to career progression is) the availability of training for leadership and management responsibilities.”*

*“My employer doesn’t allow time for work that would allow further progression”*

**Career development and progression**

With respect to career development and progression, over half agreed they had local career development opportunities (53%, n=61). But there was much less agreement to having clear career

development pathways within the profession (28% n=33). This theme was also expressed very strongly within the qualitative survey responses and focus groups.

The qualitative data indicated that starting a family is a major barrier to career progression in this profession. As a female dominated profession, part-time work is in demand for audiologists returning from maternity leave and this is not always available. A number of respondents commented that they do not feel supported by their employers once they have children and that employers are too willing to replace experienced staff with new graduates.

*"I am constantly amazed by how burn-out in audiologists is accepted by employers. There will always be a steady stream of new graduates to take the place of those who have had children, and no longer feel that working full-time in an audiology clinic is viable. Full-time clinical audiology employment is rare when women return to work after they have children, as few can handle the stress of work, and then face home life as well. It must cost the community a fortune to train new staff instead of looking after people already in the profession."*

*"I'd like to see female audiologists valued, not treated as disposable human resources, with a use by date."*

*"I am aware of a number of colleagues who, after working for many years, were not given a meaningful opportunity to return to work after maternity leave."*

*"[a barrier is] possibly being a female of fertile age. But employers have been good with supporting part-time hours [with a minimum]."*

*"Experience is not recognised for the immense value that it provides."*

*"Being female and starting a family. Numerous employers have very negative attitudes to requests for part-time work, which I have found strange, frustrating and short sighted in a female dominated profession."*

Public sector audiologists referred to a bottleneck at the grade 2 to 3 level because there is not enough funding for higher level positions. Private sector audiologists also said that there are few progression opportunities.

*"In the private sector it is quite static – very capped."*

Audiologists would also like to see more defined clinical progression pathways to allow career progress, without necessarily moving into management.

*"Progression in audiology is not related to merit or demand, it is generally related to luck (a job happens to become available) or a person being willing to move to a rural / remote location where retention is problematic."*

*"No clinical progression pathway - to progress means giving up clinical work. Clinical work is undervalued."*

*"There is not much further to go once you reach a senior level unless you want to go into management."*

*"In the public health setting, audiologists are constrained in what they can do and there's not a lot of career progression – if there is a job, everyone wants it. You might be a grade one for five or six years when you are operating at grade 2."*

When asked about the factors that had supported their career progression, respondents provided the following responses:

- Supportive manager and colleagues, ethical mentors

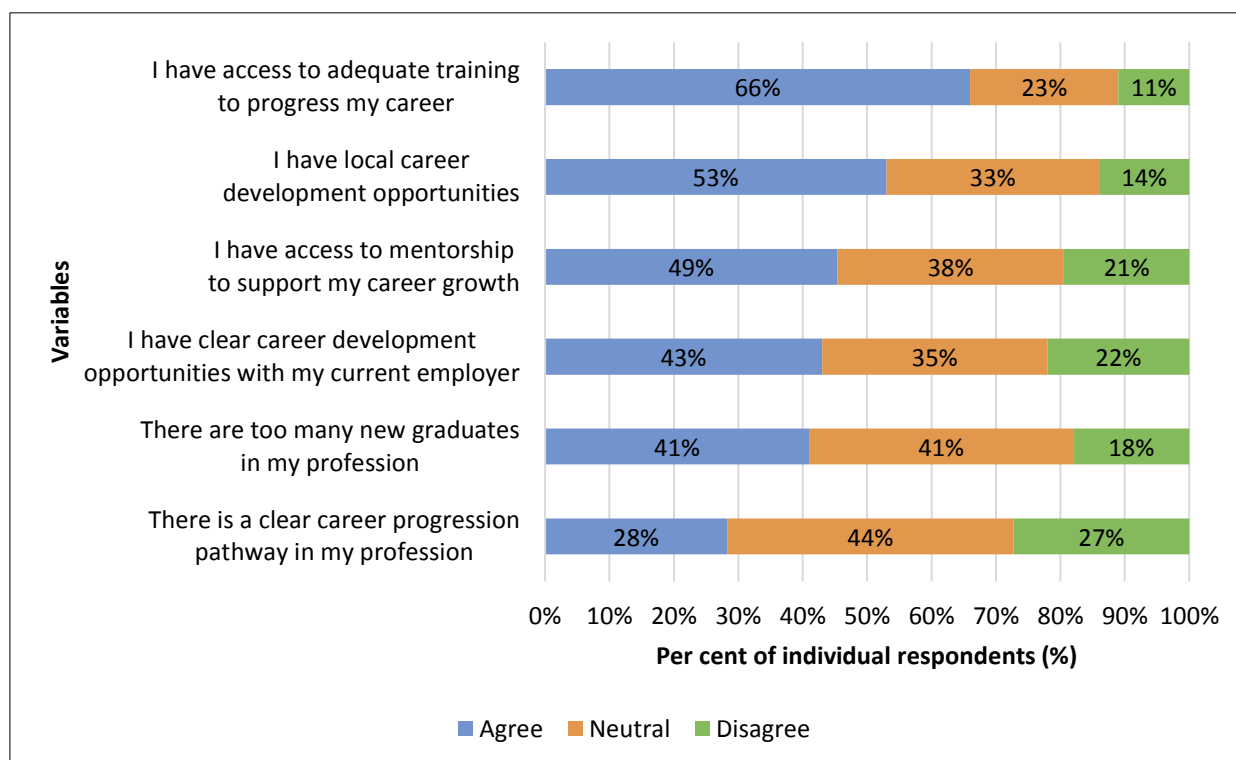
- Excellent training and CPD
- Self-drive, passion, work ethic, personal attributes
- Being prepared to work in regional locations or ability to travel and work in other locations
- Working for large organisations to increase exposure and experience
- Working in multidisciplinary teams

*“Working in a team of pre-eminent audiology professionals in an educational institution. Access to others who have completed or are completing doctoral studies.”*

*“Working at a hospital improves my exposure and experience in a diverse range of clinical skills.”*

*“Training provided within the workplace to enhance experience and knowledge of specialist areas.”*

**Figure 34: Factors influencing career progression (n=116)**



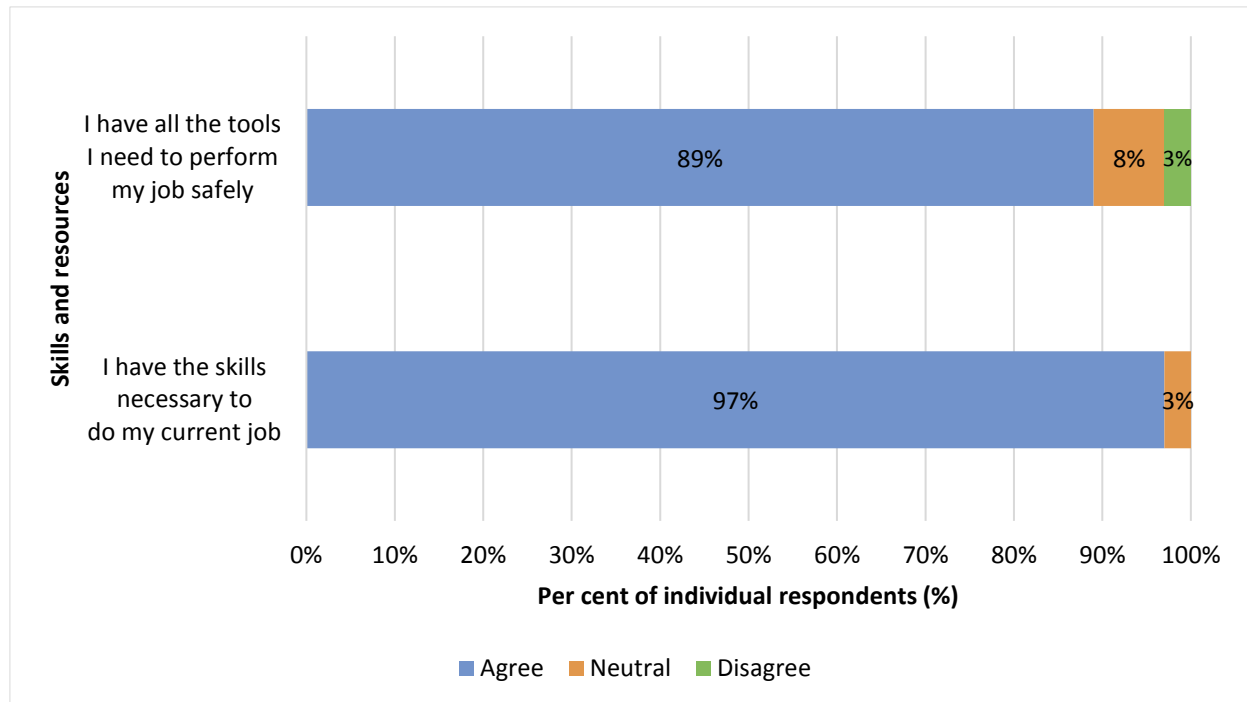
### Clinician knowledge and skills

The vast majority of audiology profession respondents (97%, n=111) indicated they have the skills necessary to perform their job. Only a very small number of people were neutral on this issue and none indicated this was not the case. Most (89%) also indicated that they have all the tools necessary to perform their role safely (Figure 35).

The qualitative findings indicated that some audiologists feel their experience is not valued by their employer.

*“Experience is not recognised for the immense value that it provides.”*

**Figure 35: Clinician skills and resources (n=114)**



**Skill gaps**

Despite audiologists overwhelmingly saying that they had the skills necessary to do their jobs, a quarter of organisations (n=8) felt that there were clinical skill gaps in the profession and over half (53%, n= 17) of the 32 organisation respondents felt that the profession had gaps in management, business and/or other professional skills.

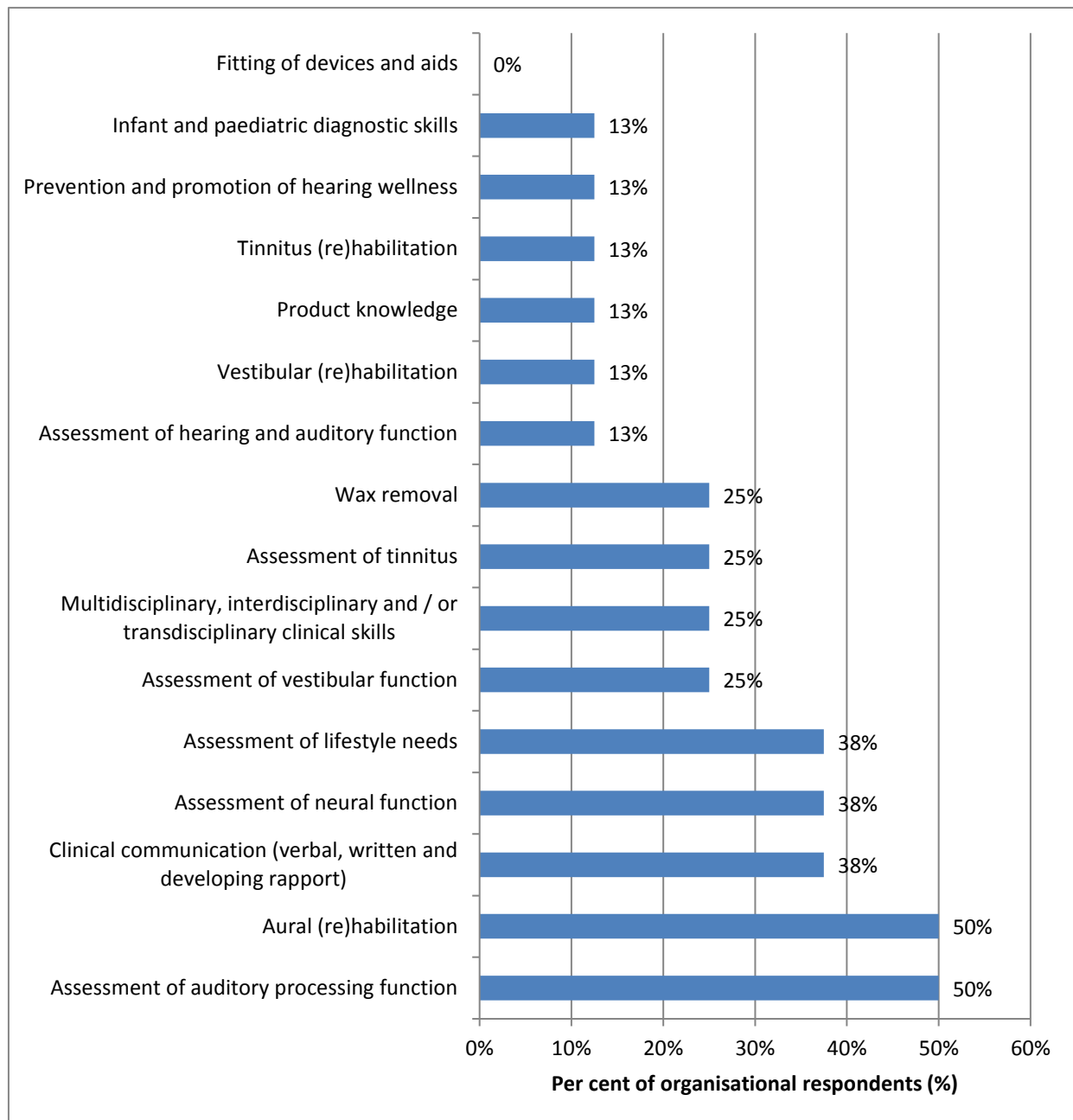
**Gaps in clinical skills**

The gaps in clinical skills that were identified spanned a range of areas and were most likely informed by the practice area of each organisation.

The most common clinical areas in which gaps were identified were assessment of auditory processing function, clinical communication (verbal, written and developing rapport), assessment of hearing and auditory function, assessment of vestibular function and multidisciplinary, interdisciplinary and/or transdisciplinary clinical skills (Figure 36).



**Figure 36: Gaps in clinician skills identified by organisational respondents (n=8)**



Audiologists themselves highlighted skill gaps in communication, both with patients and with other professionals. Some noted that skills in interacting with patients in an empathic and holistic manner needs development.

*“Professional communication – formal writing skills, clinical handover – medical and physios just naturally do this. This is something audiologists [are] not taught. What it means to be a professional in the workplace, how to talk on the phone to a referrer, how to modify for different audiences.”*

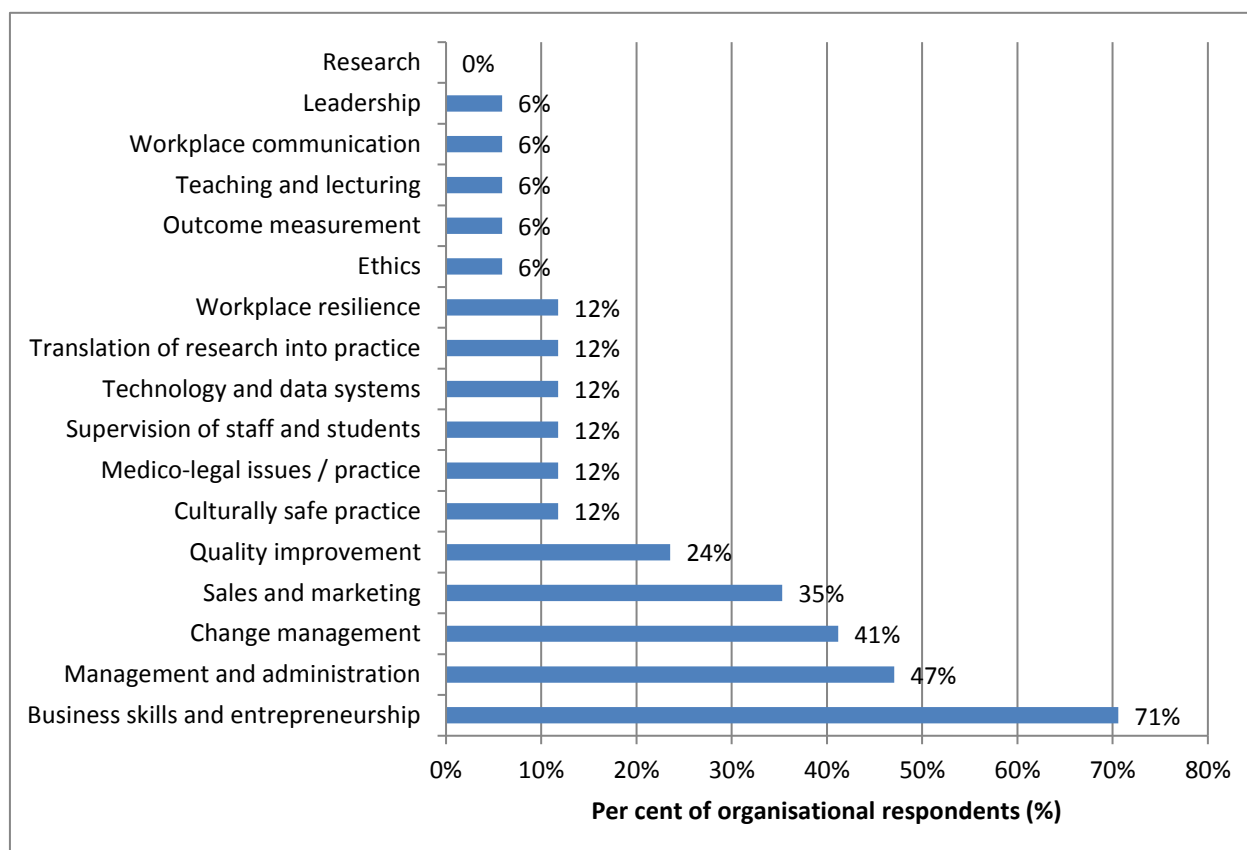
*“Meeting the diversity of patient needs but also understanding that a patient’s main concern may not be audiology so they might need some limited counselling. We might need to look at the psychosocial factors that exacerbate their tinnitus.”*

*“Counselling skills could be improved generally. It doesn’t happen as well as it should. We’d still struggle if we had someone in front of us that is very emotional about hearing loss. A handful of people might be able to handle that well, but not everyone.”*

**Gaps in management, business or other professional skills**

The most frequently reported professional skills gaps were reported in business skills and entrepreneurship, management and administration, change management, sales and marketing, and quality improvement (Figure 37).

**Figure 37: Gaps in management skills identified by organisational respondents (n= 17)**



In interviews audiologists identified a need for stronger skills in governance, quality and safety. This reflects concerns about unethical practice in the profession uncovered through the Parliamentary Inquiry into Hearing Care and Wellbeing (2017).

*“The big skill gap is the ability to appraise their work and understand quality safety and governance – there are a whole lot of people doing inappropriate things.”*

*“Education is needed for non-technical skills (e.g.: leadership, communication, quality improvement, etc.).”*

New graduates still require significant development of their professional skills when they enter the workforce. They usually participate in a very structured, highly supervised clinical certificate year to ensure they can practise the complete audiology scope of practice. But significant direct clinical experience is needed to understand how to engage with a diverse client cohort. Similar to many other AH professions, there’s a sense that critically important ‘people skills’ are lacking in new graduates and these take time to develop.

*“New graduate audiologists are not workforce ready when compared to other disciplines. Upon graduation they have only completed 200 hours of clinical practicum and are not sufficiently skilled to assess adult, paediatric and infant diagnostic cases. New graduates then complete a Clinical Certificate which takes 12 months under strict supervision. During this time, they earn a full salary. The clinical certificate year is effectively the equivalent of long term clinical placements that other disciplines undertake.”*

*“I don’t think when you graduate you’re ready for it – there’s not an appreciation of how complex the patient cohort is. There’s not that understanding in university environment that public health is like that. We do a whole lot of on the job training.”*

*“In an ideal world, graduates would be better prepared for the workplace. For example, no one ever explains that you should talk to the patient not the interpreter. There’s a missing link. They’re taught the technical skills but not people skills.”*

*“When they graduate – they have very basic skills. We invest very heavily in them for 18 months – 2 years.”*

*“Grads need to work on bedside manner – reflective listening, relationship building.”*

*“When they first start, they are very process driven which is normal. We then have to work with them about listening to the client and sometimes not being so process driven – there’s a person sitting in front of you.”*

## **Support contexts to enhance capability**

### **Supervision and support**

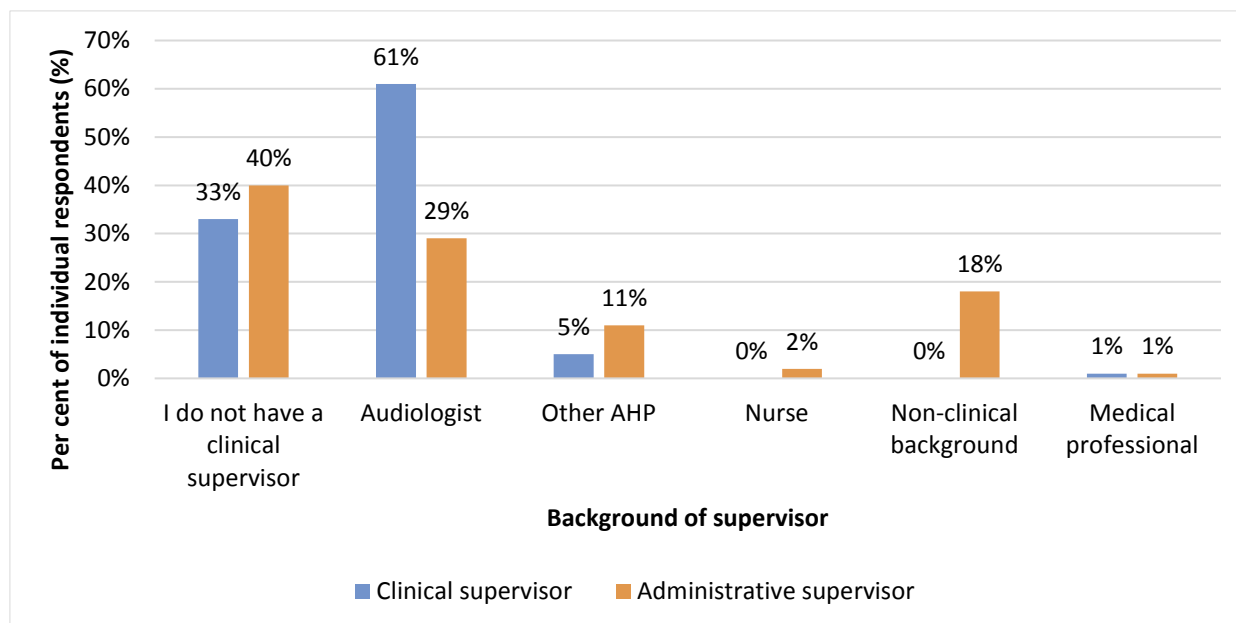
According to interviews with audiologists, public sector employees receive significant support to improve their skills, through in-house training and mentoring.

*“We do one-on-one mentoring, shadowing, in-house training. For example, we just did an Alzheimer’s virtual simulation. We recognised that a lot of Alzheimer’s patients coming in and we weren’t dealing with it so we brought in some training. We also go to a lot of interdisciplinary meetings.”*

The AHWQ2 showed that only two thirds of audiologists have a clinical supervisor. Of those with a clinical supervisor, the majority of audiologists were supervised by other audiologists 91% (n=73). Eight per cent (8%) reported receiving clinical supervision from other AH professionals.

Forty per cent (40%) of audiologist respondents reported not have an administrative supervisor. Of those that did, 47% reported to another audiologist, while 18% were supervised by another AH professional. Thirty-one percent (31%) were supervised by a person without a clinical background (Figure 38).

**Figure 38: Professional background of clinical and administrative supervisors (n=119)**



Audiologists in interviews emphasised the importance of having structured clinical supervision arrangements because of the isolated nature of the work. This was particularly important for new graduates. There was some concern amongst public providers about the quality of the supervision provided by small private providers.

*“Each of the grades will have someone who is the next grade up who will provide clinical supervision and we have peer reviews every three months.”*

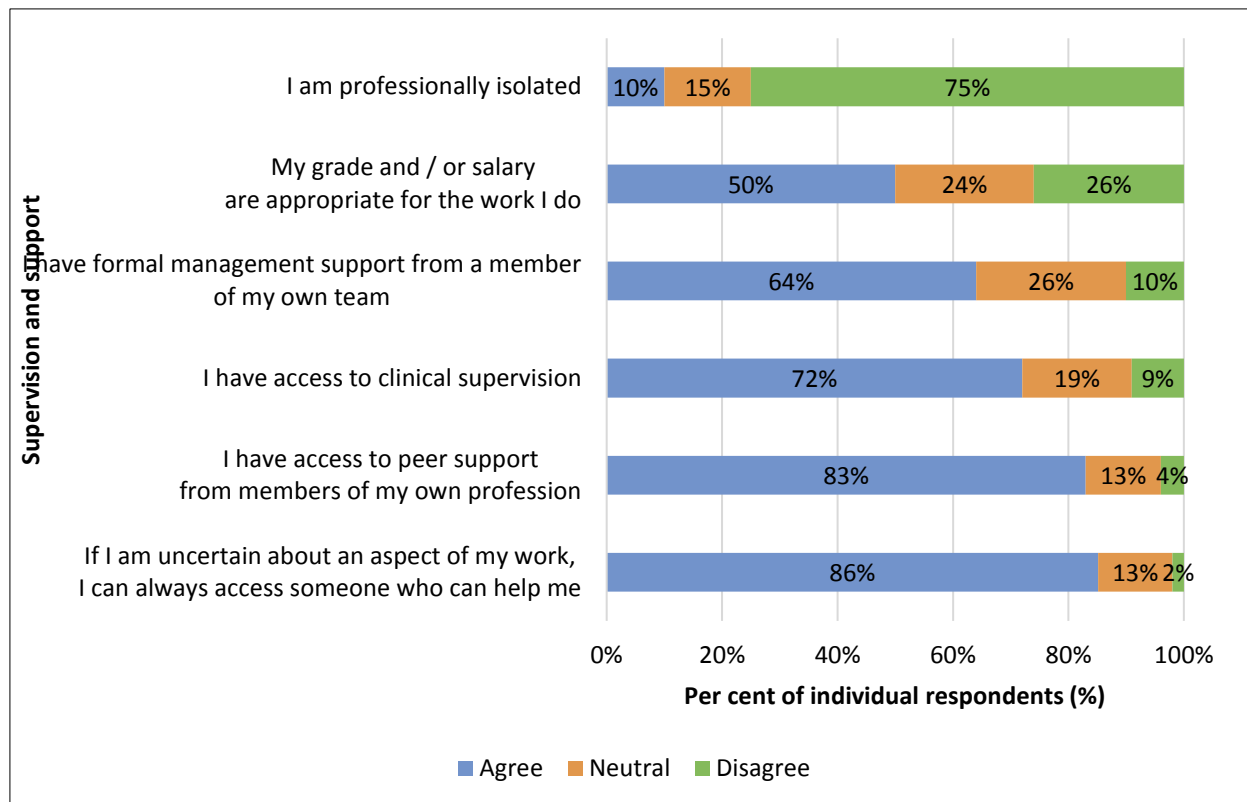
*‘Because we work in soundproof booths, you don’t know what others are doing unless you sit in with someone else – it’s important because it’s isolated work.’*

*“Sometimes difficult providing a supervisor, especially when there’s only one audiologist in the office. But we work around it – clinical throughput is less but if we don’t do it correctly the quality of graduate is poor – so we suck it up.”*

*“We have clinical coaches so we can continue with supervision and monitoring but I have often wondered with private providers, particularly small ones, what kind of contact or supervision do they have from there – how is the quality maintained.”*

Figure 39 provides further information on the support experienced by audiology respondents. Most respondents reported that they had access to peer support within their profession, they had formal management support, they were not professionally isolated, they could access assistance if they were uncertain about their work, and they had access to clinical supervision. Even so, the context of those who indicated disagreement or a neutral perspective on these issues must not be disregarded. For example, at least 10% felt professionally isolated, at least 10% did not have formal management support from a member of the team and at least 9% did not have access to clinical supervision. Further information about access to professional support and development opportunities by sector is in Appendix Table 6.

**Figure 39: Access to supervision and support**

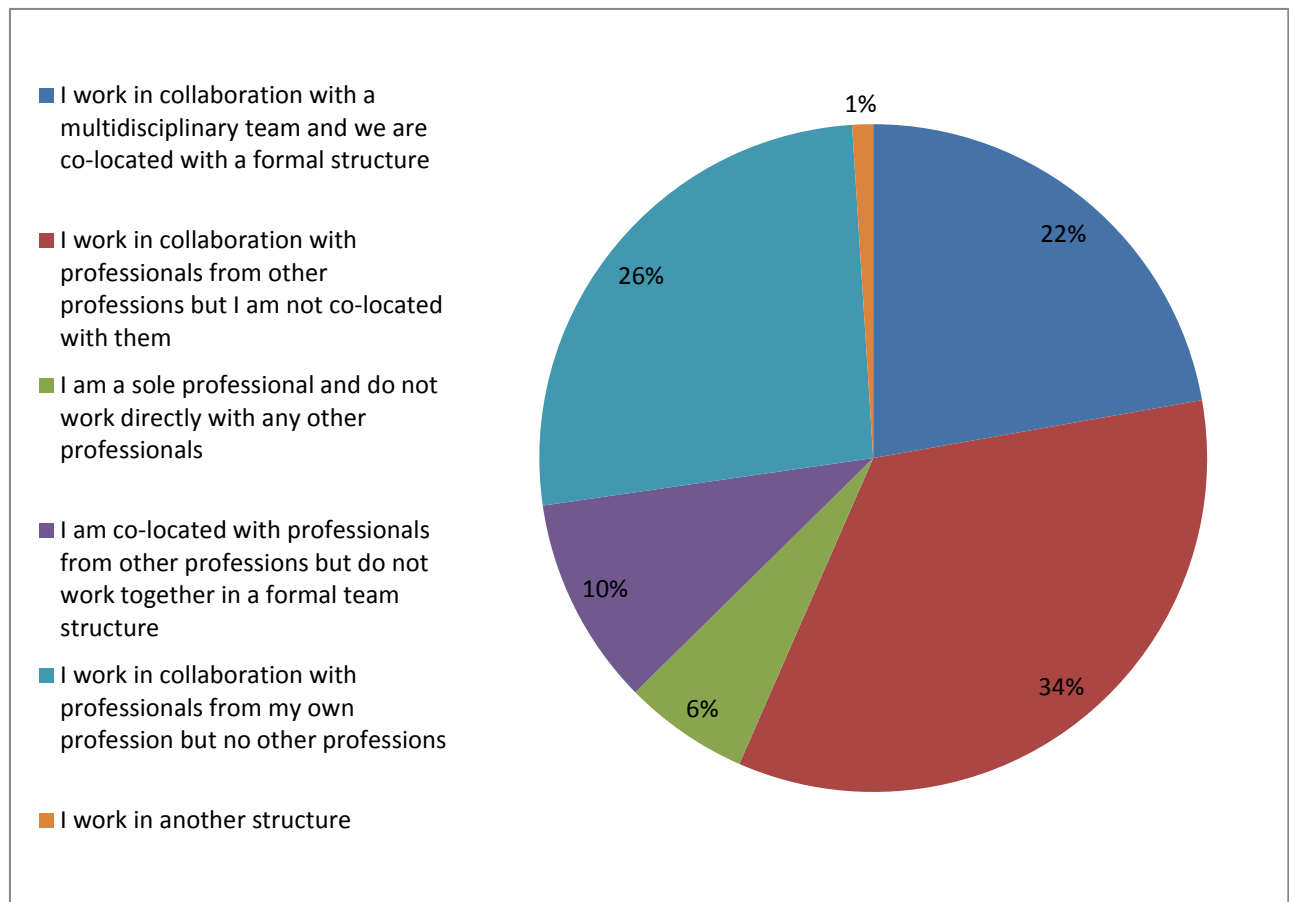


**Team structure**

Compared to other AH professions, audiologist respondents were less likely to work collaboratively. About a third said they work collaboratively with their own profession, but not others and about a quarter said they work collaboratively with professionals from other professions but were not co-located with them. Twenty-two per cent (22%) said they work in a multidisciplinary team, co-located with other professionals in a formal structure (Figure 40).

*“It’s not really multidisciplinary team based. There’s some ENTs in our area but we’re not team based. We refer to ENTs and vice versa but we don’t have case meetings about patients or anything.”*

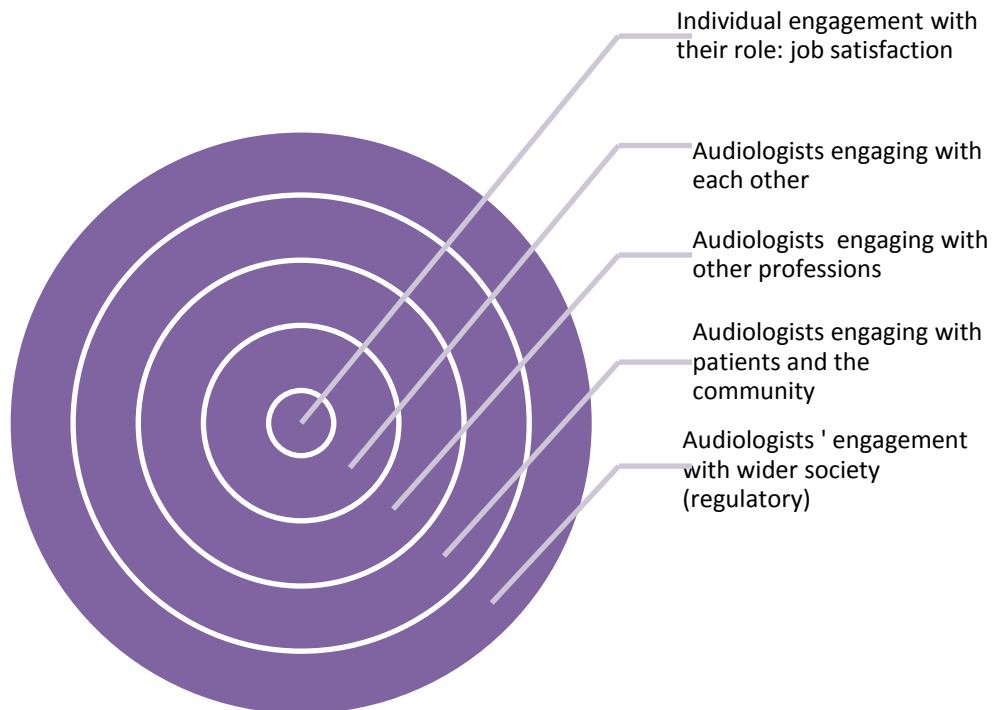
**Figure 40: Practice structure (n=117)**



## Engagement

Engagement involves a continuum from the individual practitioner's engagement with their role to the wider engagement of the profession with society through regulatory mechanisms. Within this continuum there is engagement with the profession, engagement with other professions, and engagement with patients and the community (Figure 41).

**Figure 41: Model of engagement**



## Key findings

- The vast majority of participants expressed being either extremely satisfied (40%) or somewhat satisfied (48%) with their careers.
- Respondents valued the work-life balance the profession provides and the combination of technology and people interaction.
- Career advancement and opportunities to do research were the issues for which the highest proportion of respondents reported dissatisfaction in their current working life (both 21%).
- A very high percentage of respondents (98%) were members of the profession's peak body, *Audiology Australia*. However, many would like to see the profession nationally regulated to improve the profession's reputation. The Parliamentary Inquiry (2017) also recommended national regulation to tighten the regulatory settings.
- A strong and recurring theme was the need to build community and professional understanding of the role of audiologists, particularly in relation to that of audiometrists. There were concerns for patient safety if people are confused about the limitations of the audiometrist role.
- There were also concerns that GPs do not fully understand how ear health can be supported through audiology services
- Another major theme was the need to rebuild trust in the profession after two recent government inquiries into the hearing industry found that the use of commissions has promoted practices designed to motivate clinicians to sell hearing aids ahead of considering the patient's best interests.

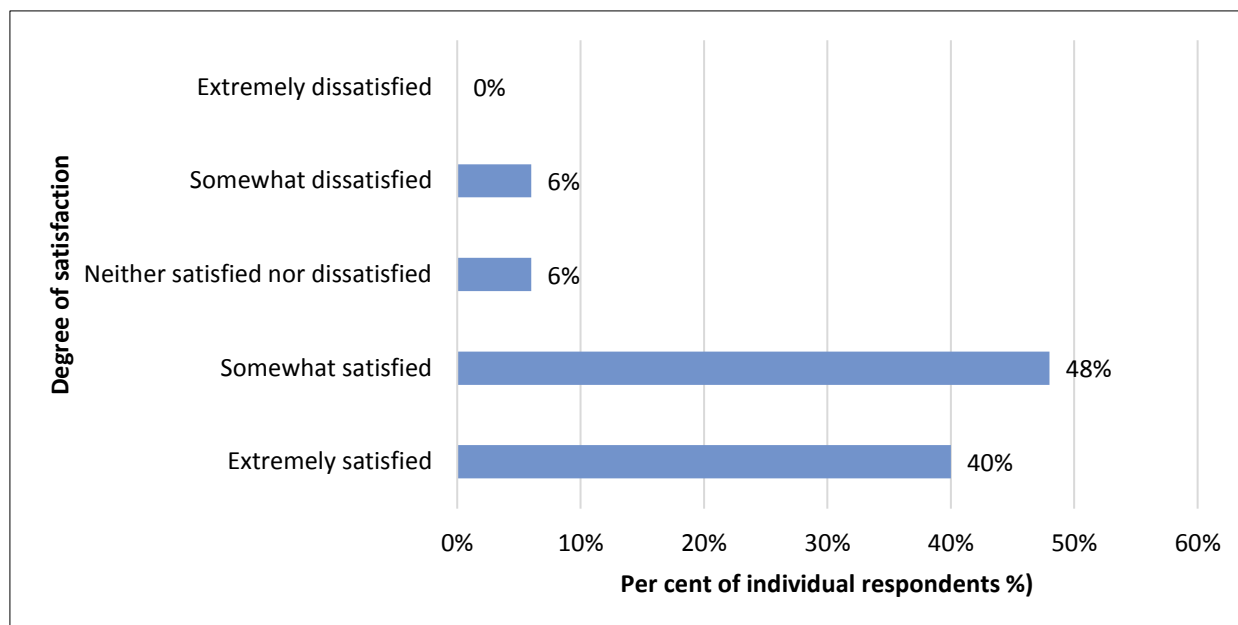
## Individual role engagement

There is a high level of satisfaction amongst audiologists. Forty percent (40%, n=47) of all audiology profession respondents reported being extremely satisfied with their current work situation. A further 48% (n=56) indicated being somewhat satisfied. No one reported being extremely dissatisfied but 6% of respondents were somewhat dissatisfied (Figure 42).

While the numbers are small, it appears that those employed in the Commonwealth public sector have higher levels of satisfaction than those employed in the Victorian public sector. For each of these sectors, those reporting that they were extremely or somewhat satisfied were high at around 90%. However, the proportion of extremely satisfied respondents in the Commonwealth was 62% compared to 36% in the private sector and 20% in the Victorian public sector.



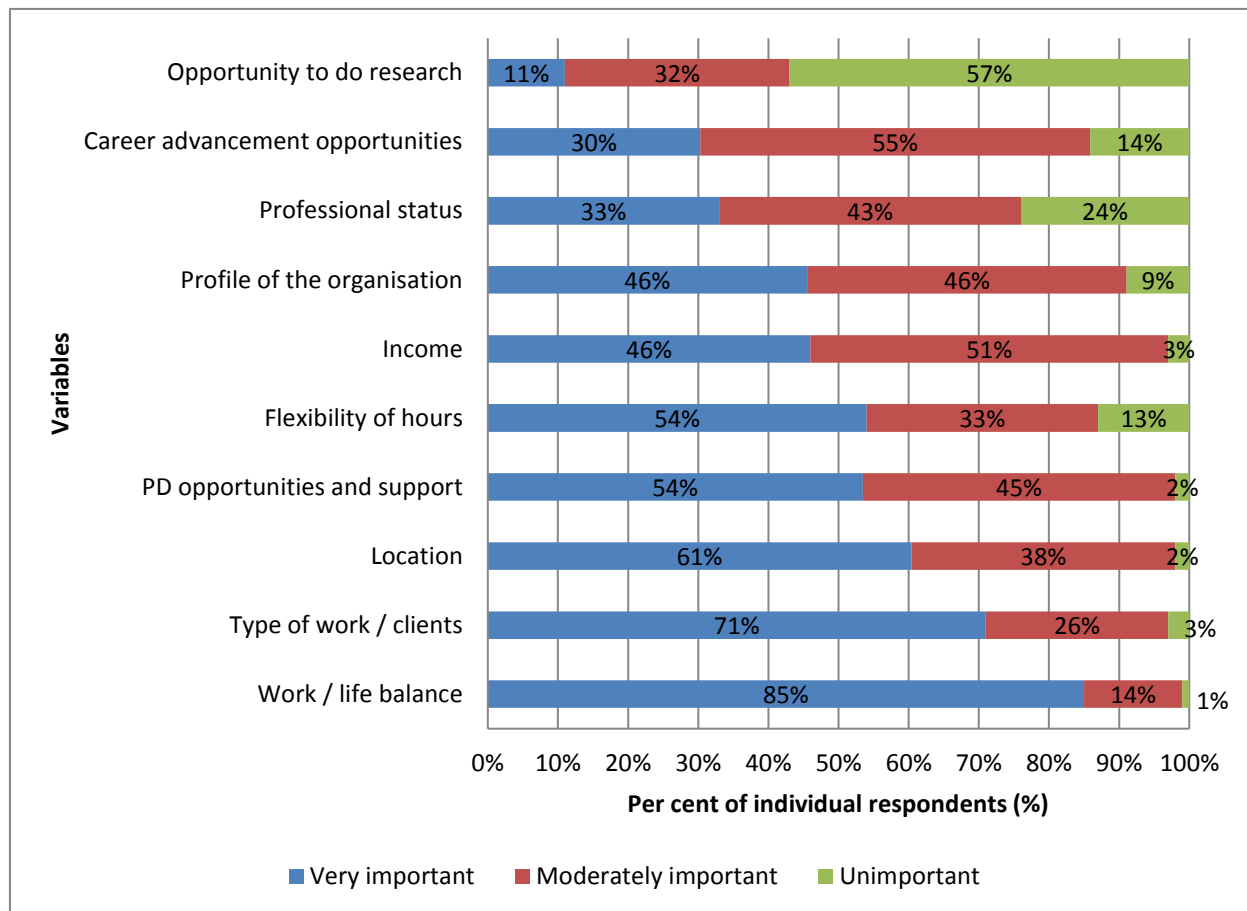
**Figure 42: Overall satisfaction (n=117)**



Participants were asked about the relative importance of different features of their employment. The three features identified as being very important to the greatest proportion of respondents were:

- work-life balance (85%, n=95)
- type of work / clients (71%, n=80), and
- location (61%, n=68) (Figure 43).

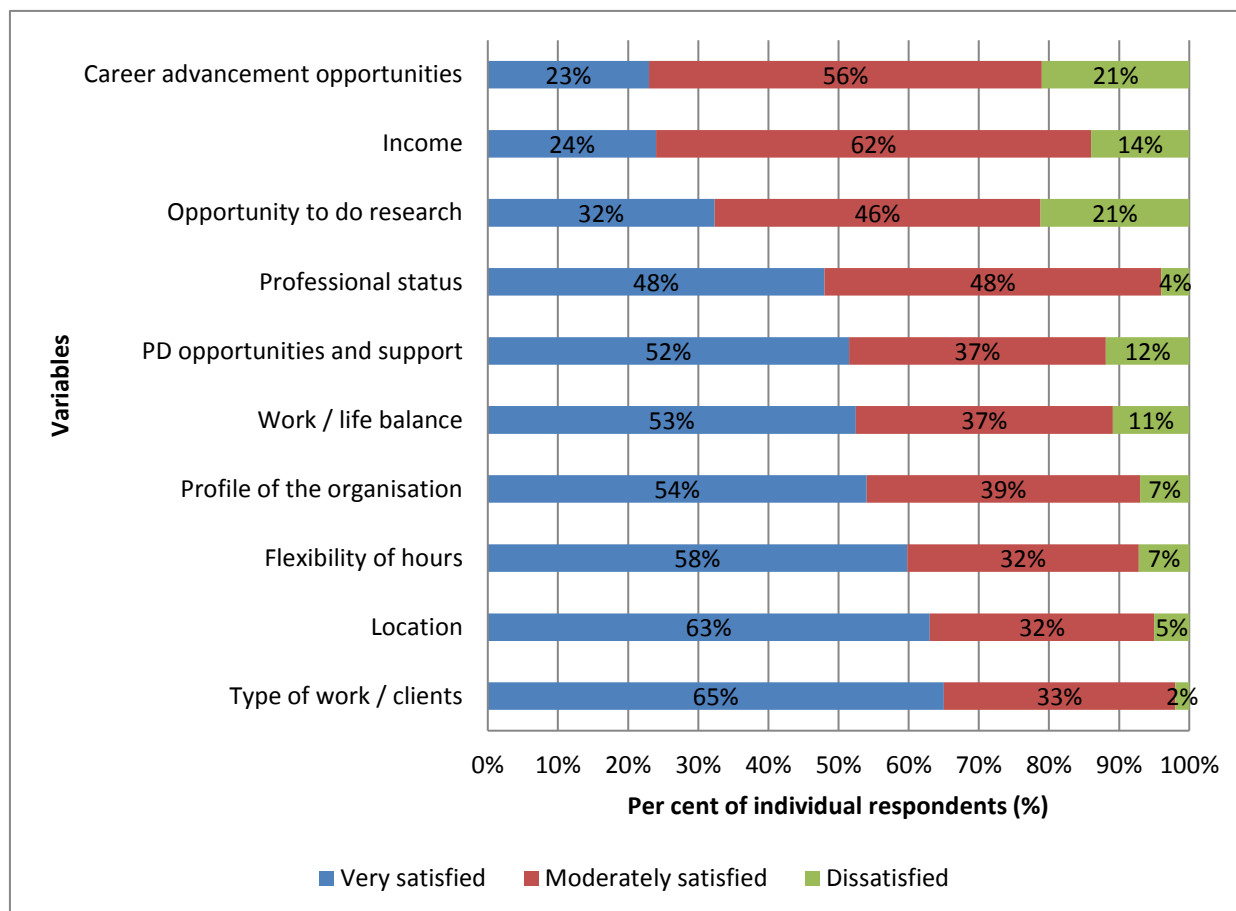
**Figure 43: Importance of factors in employment choices (n=112)**



However, the proportion of those who indicated they were currently very satisfied with these top three features was markedly lower for work-life balance but only marginally lower for type of work / clients and higher for location:

- work-life balance (53%, n=59)
- type of work / clients (65%, n=73)
- location (63%, n=70) (Figure 44).

**Figure 44: Current satisfaction with factors affecting employment choices (n=112)**



In fact, the variable that the highest proportion of respondents reported they were very satisfied with was type of work / clients and location. This indicates that there is reasonably good alignment between the work situation audiologists want and what they are experiencing. Hence, the relatively high rates of satisfaction reported.

Audiologists in the public system indicated that there was not an expectation to work overtime and the nature of the work means that you can't take it home with you. This contributes to work-life balance.

*“You leave work at work – you can't take it home. We're strict about work hours in public health and there's good wellbeing support for staff who are struggling.”*

*“Because there's such a large workforce of audiologists who are predominantly female, they are very flexible. There is a high percentage of staff at any time on maternity leave. Even managing staff, we always try and find a way to make things work for work life balance.”*

Opportunities to do research, career advancement opportunities and income were the factors where the highest proportion of respondents reported dissatisfaction in their current working life. One in five (21%) were dissatisfied with opportunities to do research and career advancement opportunities, and one in seven (14%) were dissatisfied with their income (Figure 44). That said, opportunity to do research was only considered very important by 11% of respondents and was considered unimportant by 57% and career advancement opportunities was considered very important by less than a third (30%) of respondents (Figure 43).

The issue of workplace satisfaction was explored in more detail in the focus groups; participants spoke about what they valued in their job. Key themes were:

- Diversity of clients, particularly in the public sector
- Opportunity to do diagnostic tests in public sector
- Feeding into a bigger picture for patients
- Work-life balance
- Combination of interacting with technology and interacting with people

*“What draws people to public health is because it’s so diverse and we get to do some interesting things that private don’t – outreach to Aboriginal health, research, travel to Alice Springs – all sorts of things that we couldn’t do if working privately.”*

*“Our population in general is very diverse – anything from one year old plus and high culturally and linguistically diverse – there’s all sorts of challenges.”*

*“It’s a good option for people that like technology, like people and a bit of counselling – it’s got a bit of everything. It works really well for people who are happy to play with equipment and technology but also like the people aspect.”*

A number of issues were identified in the qualitative research that impacted on work satisfaction, namely:

- Unethical practice (sales focus over patient outcomes) tainting the reputation of the profession,
- Lack of up-to-date equipment in some facilities,
- Lack of funding for positions, and
- Lack of recognition that their work is valuable.

### **Intra-professional engagement**

AA is the main peak body for the audiology profession. The association represents most of audiologists currently practising in Victoria. They currently have over 2,600 members nationally and if audiologists wish to bill Medicare, private health insurers, the Hearing Services Program etc., one of the prerequisites is that they are a member of the association (AA, 2018). Ninety eight per cent (98%) of the individual respondents to this survey were members of AA.

AA provides education and advocacy for the profession, and sets standards of practice including awarding the *Audiology Australia Accredited Audiologist* certification which requires adherence to annual CPD requirements and a code of conduct. It also accredits audiology training programs.

However, there are three other key Australian professional associations for audiologists and audiology businesses:

- The Australian College of Audiology which promotes and develops the science and practice of hearing care,
- Independent Audiologists Australia which promote and support clinical practices owned by audiologists, and
- Hearing Business Alliance which is focussed on supporting small, independent hearing care businesses.

In order to provide hearing services under the Australian Government’s Hearing Services Program, an audiologist must be a member of either AA or the Australian College of Audiology.

Professional isolation was reported as an issue for 10% of respondents and 15% were neutral on this issue. Qualitative comments from a few respondents shed some light on why this might be the case. One reason put forward is that audiologists work alone in soundproof booths so the work environment itself is isolated; the other reason is that it is a small profession, working relatively independently of other health

professions. There are a number of large hearing clinic chains and public services, but equally many small clinics and hospitals only employ one or two audiologists.

## Inter-professional engagement

Fifty-six percent (56%) of audiologists reported that they worked in collaboration with other professionals. Twenty-two percent (22%) worked in a formally structured multidisciplinary team and 34% worked with other professions but were not co-located with them. Nevertheless, about a third of respondents indicated they did not work directly with other professions (Figure 40).

In terms of their relationship with other professions, many audiologists were reliant on ENTs or other medical professionals to access Medicare rebates to perform their services. A number of audiologists said they would like to operate more independently. This was particularly an issue for audiologists that do not work alongside ENTs in team structures.

*“Independence - ability to access Medicare without referral from an ENT specialist or neurologist.”*

*“Recognition as a valuable independent profession with independent access to Medicare.”*

*“Audiologists should be able to access Medicare services for their patients. It is currently only accessible for ENT’s. Some audiologists use the ENT’s Medicare number if they work under or alongside an ENT; however, many audiologists run their own practice and are not affiliated with an ENT. This means we have to offer free hearing tests to remain competitive.”*

Some audiologists are concerned that other professionals are venturing into the audiology ‘patch’ but may not appreciate the complexity of the discipline. According to one respondent, physiotherapists and occupational therapists are increasingly undertaking interdisciplinary practice which overlaps with the audiology role supporting hearing loss and balance.

*“There’s a lot of overlap in physio and OT [occupational therapy]. For other people to just have a go at our work, it negates what we do and doesn’t account for the complexity of the ear.”*

A number of audiologists said that they would like more engagement with GPs. They believe that working together with GPs more proactively could significantly improve the community’s hearing health. The recent Parliamentary Inquiry found that there is a low level of awareness in the community about hearing health issues and how to address ear and balance disorders. Greater GP engagement may assist to address this issue. Some see this work with GPs as potentially an advanced practice activity.

*“It’s important for GPs to have more awareness. We go and talk to them about hearing loss and our services. They’re not fully across it. Even childhood hearing loss – temporary assistance – not aware of that. Sometimes our clients really put a lot of trust in their GPs. We might encounter someone who has a free hearing check but they cancel appointment because GP says they don’t need it. GPs overlook it because it’s not a priority. Some GPs don’t know how to read and understand a hearing test. We talk to them about the comorbidities associated with hearing e.g. diabetes, dementia, cardiovascular – compounding an already complex issue.”*

*“(an advanced role could be) assisting/instructing GPs with ear health management”*

*“Teaching GPs for referral to audiology”*

Some audiologists would prefer not to be aligned with AH. As a small profession, they feel they get lost in the AH management structure. They also feel they have more in common with the medical professions than with therapists or other AH professionals.

*“We’re more successful when aligned with a medical area – not therapy – or diagnostic like MRI [magnetic resonance imaging]. Doctors help us fight in the system. We get completely lost in AH.”*

*“We’re the little guy, easy to push down, gets pushed around. Throughput is low and staff levels low compared to big departments therefore [they] think we don’t need money and space.”*

*Alignment under AH structure does not work as well as alignment under medical structure. Like us, medicos have small EFT per unit and respond to whole of organisation needs. AH focus is on complexity of managing large numbers of staff across the organisation.”*

*“Line management for audiology should be under medical model - either ENT, neurology or paediatrics. Audiology’s complexities are not the same sort of complexities that AH traditionally manages. Our real support comes from medical.”*

## **Engagement with the community and society**

Audiologists would like to see improved understanding within the community about what they do. There is little understanding about the impact of hearing loss and what can be done about it and many misconceptions about the role of audiologists.

They also say there is significant confusion within the community around the role of the audiologist versus the role of the audiometrist, and that most people, including other health professionals, do not understand the difference. They see some danger in this lack of understanding as patients may be under the misconception that their hearing issues are being comprehensively diagnosed when they visit an audiometrist.

*“The general public doesn’t understand difference between audiologist and audiometrist. In aged care, they don’t care – only that someone is coming to see their residents. Even when we talk them through it the aged care facilities don’t care.”*

*“It’s about community understanding of the limitations of the role. Audiometrists are just testing and hearing aids – not diagnostic.”*

*“To receive appropriate health sector and community recognition, audiologists are tertiary qualified, post-graduate trained specialists and are very different to audiometrists. Too much emphasis has been placed on hearing aid dispensing by employers in the private sector and they often advertise for either when advertising a position. This is an insult to the years of training required to become an audiologist. An audiologist should also be able to Medicare bill in their own right which is a further blight on the profession’s standing.*

*“I don’t think the community understands. We do a lot of presentations to community groups. We find that there are misconceptions about hearing aids and what we do. It would be valuable to have greater awareness. When you look at the stats around hearing loss, people don’t take action for seven to 10 years when they notice their hearing deteriorating.”*

*“In hospital people don’t know the difference ...you can end up with dangerous situations.”*

As previously noted, the hearing industry has been the subject of two government inquiries in 2017. These inquiries have revealed some poor practices in the industry in regard to putting hearing aid sales ahead of patient outcomes. The reputational damage was of major concern to audiologists and was a key theme in this research. Audiologists hoped that trust in the profession can be rebuilt and unethical players are weeded out.

*“The profile of audiology has gone from non-existent to negative on the course of my professional career and this saddens me.”*

*“Public trust in audiologists and audiology - too many commissions, not enough transparency. I don’t feel confident referring family and friends to audiologists I haven’t personally met.”*

*“The commission-based earnings and sales targets placed on audiologists takes away from patient-centred practices and creates a negative stigma toward audiologists and the field.”*

*“The ACCC report is not an exaggeration, just the tip of the iceberg. I used to be proud to say to other people I was a nurse, I feel embarrassed to tell other people I am an audiologist; they think you are just a salesman.”*

As with many non-AHPRA registered AH professions, respondents were concerned about the lack of regulation in the hearing industry and some wanted the profession to become regulated. This reflects the community unease highlighted in two 2017 Government reports about misleading behaviours driven by sales commissions in the hearing industry (ACCC, 2017, Parliament of Australia, 2017). The need for more regulation was supported by the recent Parliamentary Inquiry that concluded that greater regulation is needed in the industry and recommended that the Australian Government pursue the registration of the audiology and audiometry professions under the AHPRA framework with the Council of Australian Governments.

*“Audiology is very poorly organised professionally compared to my old profession, nursing. Because of the low numbers I also believe it can be dominated by individuals with a personally-led self-serving agenda which is not necessarily advancing the profession. Sanctions for unprofessional and unethical behaviour are also non-existent which is at odds with anecdotal or what clients report to me after they have changed clinicians. Poor compliance and audit capabilities from federal and state sectors. The ACCC [Australian Competition and Consumer Commission] report is not an exaggeration, just the tip of the iceberg. I used to be proud to say to other people I was a nurse, I feel embarrassed to tell other people I am an audiologist; they think you are just a salesman.”*

*“I feel like there is a lack of regulation in our industry. Who’s monitoring this?”*

*“The ACCC report this year showed the whole industry in a bad light. The lack of regulation is a real issue, I believe. My partner could walk out into the street today and start selling hearing aids with no quals [qualifications] and that’s ok.”*

# Conclusion

Audiology is a young, stable and relatively well-paid AH profession which attracts people who enjoy interacting with both technology and people.

While there are sufficient numbers of new audiologists graduating, there are currently not enough publicly funded positions available to meet community demand. Regional areas find it difficult to attract and retain experienced audiologists. The implementation of the recommendations of the 2017 Parliamentary inquiry into Australia's hearing health will increase demand for public hearing services, potentially leading workforce undersupply.

On the whole, audiologists were satisfied with their jobs, but some feel professionally isolated and many feel stymied by a lack of career progression. Lack of understanding amongst other health professionals, as well as the general community, about what they do was also an issue for the profession.

The most significant issue the profession is facing is repairing the reputational damage that occurred with the exposure of practices designed to motivate clinicians to sell hearing aids ahead of considering the patient's best interests.

In the wake of the 2017 Parliamentary Inquiry, audiologists are looking forward to a new era of stronger regulation, greater attention to hearing health amongst vulnerable groups, and renewed trust in the profession.



# References

Audiology Australia (2018). *About clinical certification*. <https://audiology.asn.au/index.cfm//clinical-certification-and-membership/audiology-australia-accredited-audiologist/about-clinical-certification/>

Audiology Australia (2017). *How to determine the scope of your own practice*. <http://audiology.asn.au/index.cfm/resources-publications/professional-resources/how-to-determine-the-scope-of-your-own-practice/>

Audiology Australia. (2010). *Hearing the need: Audiology and primary ear health care reform*. <http://www.audiology.asn.au/index.cfm/resources-publications/position-papers/>

Audiology Australia. (2008). *What is an audiologist*. <http://www.audiology.asn.au/index.cfm/resources-publications/information-brochures/>

Australian Consumer Complaints Commission (ACCC) (2017). *Issues around the sale of hearing aids: Consumer and clinician perspectives*. <https://www.accc.gov.au/system/files/Issues%20around%20the%20sale%20of%20hearing%20aids%20-%20Consumer%20and%20clinical%20perspectives.pdf>

Parliament of the Commonwealth of Australia (2017). *Still waiting to be heard... Report on the Inquiry into the Hearing Health and Wellbeing of Australia*. House of Representatives Standing Committee on Health, Aged Care and Sport. Canberra: Commonwealth of Australia

# Appendix

The following section contains additional data, figures and tables referred to in the main report relating to the data collected through the AHWQ2 audiology survey.

## Responses and respondents

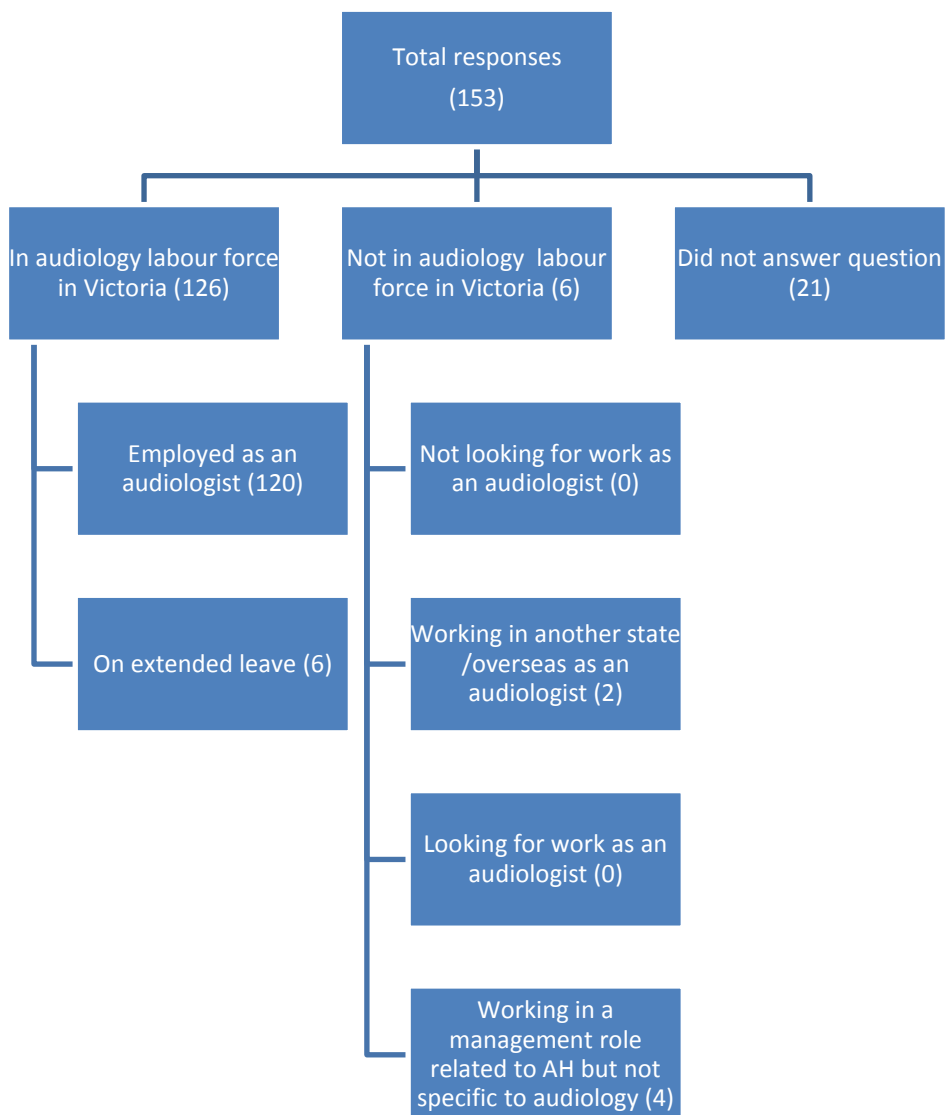
The AHWQ2 survey was completed at both the organisational and individual practitioner level. The respondents to the organisational / managerial level questions were presented with 12 questions, plus four questions that were conditional on answers to previous questions; the individual clinicians were presented with 66 questions plus seven questions that were conditional on the answers from previous questions. Completion of the survey was voluntary and respondents, both organisational and individual, had the opportunity to choose if they wished to answer a question or not. Some questions allowed for multiple answers. As a result, the number of responses for each question varied and is included in the presentation of the data for each question.

A total of 153 audiologists completed at least one question on the survey and submitted their survey. The range of respondents to an individual question ranged from 21 to 537. Responses from all persons who answered an individual question have been included, irrespective of whether they completed the entire survey or not.

A total of 44 respondents (29%) provided their email address and agreed to be followed up for further research.

Most respondents (95%) were employed in the audiology workforce in Victoria at the time of completing the survey. None of the six respondents who indicated they were not currently employed as an audiologist in Victoria reported they were seeking work.

**Figure 1: Current employment status<sup>6</sup>**



<sup>6</sup> All data in Figure 1 and Tables 1 – 14 comes from AHWQ2 survey

**Table 1: Principal area of practice and all other areas of practice <sup>a</sup>**

Areas of practice	Principal area of practice	All other areas of practice
	Count	Count
Auditory processing	1	27
Cancer	0	11
Cochlear implants	7	14
Disability (developmental, intellectual, acquired brain injury)	0	10
Diagnostic hearing testing	28	96
Hearing aids	57	92
Infectious diseases	0	8
Indigenous outreach	0	7
Neonatal	0	21
Paediatric	17	73
Presbycusis	1	46
Tinnitus	1	60
Vestibular	8	22
Workplace health and safety including noise induced hearing loss	0	30
Ear wax removal	0	5
Auditory rehabilitation	3	3

<sup>a</sup> Respondents could select more than one response to signify 'all other areas of practice'.

**Table 2: Number of jobs held as an audiologist across the career path (n=130)**

Number of jobs	%	Count
One / this is my first and only job as an audiologist	30	39
2	19	25
3	18	24
4	10	13
5	12	15
6	9	12
>10	2	2
<b>Total</b>	<b>100</b>	<b>130</b>

**Table 3: Employment location – first position, position prior to current position, current main position (n=106 - 127)**

Location	First position		Position prior to current position		Location	Current main position	
	%	Count	%	Count		%	Count
Victoria - Metropolitan	39	40	62	66	Metropolitan	71	90
Victoria - Regional	26	27	15	16	Regional	22	28
Victoria - Rural / remote	<5	<5	<5	<5	Rural / remote	<5	<5
Australia - Metropolitan	17	17	8	9			
Australia - Regional	7	7	<5	<5			
Australia - Rural / remote	<5	<5	<5	<5			
Overseas	8	8	8	9			
Other	<1	4	0	0			
<b>Total</b>	<b>100</b>	<b>109</b>	<b>100</b>	<b>106</b>		<b>100</b>	<b>127</b>

**Table 4: Qualifications held or currently studying (n=133)**

Qualification	Current qualifications	Currently studying	First qualification enabling practice as an audiologist
Certificate III	0	1	0
Certificate IV	7	0	0
Diploma	4	0	2
Advanced diploma	2	0	0
Associate degree	0	0	0
Bachelor degree – directly related to professional entry	31	0	8
Bachelor degree – not specific to profession	69	1	7
Honours degree	32	0	3
Graduate certificate	3	1	1
Graduate diploma	52	1	40
Master's degree - Graduate entry/prof practice	83	1	69
Master's degree – management/research/other	10	3	1
Professional doctorate	3	1	0
PhD	6	3	2

**Table 5: Location where respondents gained their first qualification as an audiologist (n=133)**

Country	%	Count
Victoria, Australia	75	100
Other Australian state or territory (not Victoria)	12	18
New Zealand	4	5
United Kingdom	1	1
Canada	0	0
United States of America	1	1
Ireland	1	1
India	3	4
Other overseas country	2	3
<b>Total</b>	<b>100</b>	<b>133</b>

**Table 6: Proportion of respondents indicating they ‘agree’ with statements about their current experiences of professional support and development opportunities**

For each of the sub-questions the number of responses varied, therefore the number of individuals who agreed with each statement is included and the per cent of the respondents this represents.

	State public sector (n=697)	Commonwealth public sector (n=105)	Private practice (employee / subcontractor) (n=13)
I have access to clinical supervision	82% (n=18)	89% (n=19)	67% (n=27)
If I am uncertain about an aspect of my work, I can always access someone who can help me	91% (n=19)	90% (n=16)	82% (n=18)
I am professionally isolated	4% (n=9)	5% (n=15)	7% (n=12)
I have formal management support from a member of my own team	64% (n=22)	71% (n=21)	60% (n=25)
I have access to peer support from members of my own profession	79% (n=14)	91% (n=15)	79% (n=15)
My grade and / or salary is appropriate for the work I do	38% (n=24)	71% (n=20)	43% (n=28)
I have the skills necessary to do my current job	100% (n=24)	95% (n=19)	100% (n=23)
I have all the tools I need to perform my job safely	75% (n=24)	90% (n=21)	96% (n=28)