Victorian Allied Health Workforce Research Program

Exercise Physiology Workforce Report

March 2018



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Abbreviations and acronyms

AEP Accredited Exercise Physiologist

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

DVA Department of Veterans' Affairs

EFT Equivalent full time

EP Exercise physiologist

ESSA Exercise & Sports Science Australia

GP General practitioner

MBS Medical Benefits Scheme

NDIS National Disability Insurance Scheme

NFP Not for profit

PD Professional development

TAC Transport Accident Commission

VPSC Victorian Public Service Commission

Executive summary

Overview

This report provides an overview of the exercise physiology workforce in Victoria in 2017. It is based on survey responses from 430 exercise physiologists, representing 50% of exercise physiologists with Accredited Exercise Physiologist (AEP) status in Victoria at the time of the survey (ESSA, 2017); two focus groups involving a total of seven participants; two individual interviews; and surveys from 119 employers and managers of organisations that provide dietetic services in Victoria.

When contrasted with 2017 data from Exercise and Sports Science Australia (ESSA) (ESSA, 2017), the respondent cohort included an over-representation of female respondents, but an accurate representation of individuals aged 35 years and under and those aged 55 and over. It was not possible to determine the representativeness of the sample with respect to sector of practice or regionality due to a lack of alternate state-wide data for these parameters.

Key findings

AHWQ2 survey	ESSA AEP, 2017 ^a	VPSC, 2016 ^b
430	852	208
64%	54%	71
0		
74%	77%	89%
3%	2%	2%
30		
\$60,000 to \$69,999		
36%		100%
6%		
48%		
Musculoskeletal 39%	-	
N/A	-	
37%	-	
15%		
Master degree – 42%		
3%	-	
75%	-	
17%		
50%	-	
5%		
	430 64% 0 74% 3% 30 \$60,000 to \$69,999 36% 6% 48% Musculoskeletal 39% N/A 37% 15% Master degree – 42% 3% 75% 17% 50%	430 852 64% 54% 0 74% 77% 3% 2% 30 \$60,000 to \$69,999 36% 6% 48% Musculoskeletal 39% - N/A - 37% - 15% Master degree - 42% 3% - 75% -

^a Source: ESSA membership data, 2017

The Victoria exercise physiology workforce is young and includes slightly more females than males. The profession saw high levels of growth in the early years of this decade. More recently, this rate of growth has reduced in the context of ESSA introducing more stringent training requirements for eligibility for AEP status.

Research respondents reported working across public, private and not-for-profit sectors, although the largest single employment sector was the private sector (48%). Across respondents' roles over time, there was a slight increase in individuals employed in metropolitan and regional areas of Victoria and a

^b Source: Victoria Public Service Commission, 2016

reduction in those employed in other parts of Australia. Participants' showed movement away from the private sector across their careers and towards the public sector. This shift is likely to reflect not only individual professional choice but also an increase in funding of public exercise physiology positions over time.

When considering the client mix supported by respondents, the vast majority worked with adults. No participants reported working with children under five years and very few reported working with individuals under 17 years. On average, respondents indicated that clients who identify as Aboriginal and / or Torres Strait Islander constituted 7% of their caseloads and just over one quarter (27%) of their caseloads were people from culturally and linguistically diverse backgrounds.

Work-life balance, continuing professional development opportunities and support, and career advancement opportunities were the most frequently identified variables relevant to employment choices. However, the proportion of respondents satisfied with these variables in their current employment was significantly lower than the proportion noting the variables to be very important. Lack of a career pathway and poor progression opportunities was a strong and recurring theme.

Although 59% of respondents reported being somewhat satisfied with their current work situation, only 23% reported being extremely satisfied. Even so, more than half the respondent group indicated an intention to stay in the profession for more than 10 years from the time of the survey. Contributors to job satisfaction included making a positive difference to the health and quality of life of clients, having the chance to work across diverse clinical domains and service sectors, exercise physiology being valued in the workplace, contributing to the development of a new and growing workforce, and recognising small signs of improvement in career pathways for exercise physiologists.

The research revealed significant concern regarding lack of employment opportunities available for exercise physiologists. Participants explained that many of the roles that do exist are part-time and insecure (contract or casual). Those unable to secure employment as an exercise physiologist often worked in allied health assistant roles. This is believed to contribute to lack of recognition of exercise physiologists as autonomous professionals and perpetuates the poor professional and community awareness of the exercise physiology role, scope of practice, and evidence-base.

Research participants reported pay rates lower than other allied health professions. Quantitative data indicated that one in four respondents were in a contracted position rather than a permanent role. Nearly a quarter of all respondents earned less than \$40,000 and 68% earned less than \$70,000. Lack of equity in government and private health insurance rebates for exercise physiology services was identified as an important contributor to this situation.

Exercise physiologists were often employed in small numbers or in sole positions. In these circumstances, administrative and clinical supervision was often delegated to physiotherapy managers or professional from other disciplines. For many exercise physiologists (but not all) this made it difficult to access adequate profession-specific clinical supervision and compromised development of the role within their service.

Participants highlighted the opportunity for more effective use of the available workforce and reduced clinical risk, if the roles, scope of practice, and differences between exercise physiologists, physiotherapists, and personal trainers were more clearly defined.

Respondents emphasised the key role of exercise physiology in prevention of and responses to injury, illness, and chronic disease. However, respondents expressed frustration at the limitations on being able to contribute the professions' full potential due to inadequate attention to prevention and early intervention by GPs; inadequate understanding of the professions' role; and lack of rebates for clients at risk of chronic disease, in contrast to funding available for those with established chronic disease, disability or injury.

Conclusion

Key areas for future consideration for the exercise physiology profession include:

- Improving community and professional understanding of the exercise physiology role, scope of practice, and evidence-base.
- Developing employment opportunities, career pathways and progression opportunities that encourage exercise physiology as a long-term career choice.
- Reviewing funding models and government and private health insurance rebates to align better with other allied health professions.
- Establishing models of care and funding models that facilitate effective use of the knowledge and skills of exercise physiologists in prevention and early intervention.
- Increasing knowledge of the employment destinations of exercise physiologists, not only in their early career but also over time.
- Establishing opportunities for clinical supervision of exercise physiologists by other exercise physiologists, particularly for sole practitioners and professionals working in very small departments.
- Achieving clarity regarding the points of differentiation and the similarities between exercise
 physiologists, physiotherapists, and personal trainers, and how the mix of roles can contribute most
 effectively and efficiently to achieving optimal individual and community health outcomes.
- Advocating for parity of pay and entitlements where exercise physiology is delivering professional services of an equivalent level of expertise and autonomy to other professions.

Introduction

The Victorian Allied Health Workforce Research Program (the program) aims to contribute to the evidence base of 26¹ 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 exercise physiology 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.

¹ 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 exercise physiologists?

Exercise physiologists are AH professionals who specialise in the delivery of exercise, lifestyle and behavioural modification programs for the prevention and management of chronic diseases and injuries. Exercise physiologists provide physical activity and behaviour change support for clients with conditions such as cardiovascular disease, diabetes, osteoporosis, depression, cancer, arthritis, chronic obstructive pulmonary disease and many more.

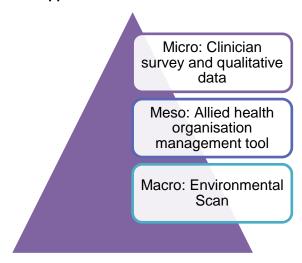
Exercise physiology is not a registrable profession under the *National Registration and Accreditation Scheme / Australian Health Practitioner Regulation Agency* (AHPRA). Exercise & Sports Science Australia (ESSA) provides self-regulation for the profession and is a member of the *National Alliance of Self Regulating Health Professions*.

Professionals who meet specified standards can seek accreditation by ESSA. Eligibility for recognition as an Accredited Exercise Physiologist (AEP) by ESSA requires completion of either a four-year full-time bachelor degree or a two-year full-time graduate-entry master's degree from an ESSA accredited course (ESSA, 2017a).

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 exercise physiology 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

Survey respondents who agreed to be followed-up via email were invited to participate in one of four focus groups. One group was specifically for early career professionals, while the remainder were heterogeneous, but designed to include a mixture of participants according to rurality and public, private and NFP sectors. The focus groups 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 teleconference using Zoom and was approximately 90 minutes. The focus groups were 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 exercise physiologists. 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 were sent to professional groups associated with exercise physiology including ESSA and Fitness Australia; State and Commonwealth agencies and services including the Country Fire Authority, Department of Defence, Metropolitan Fire Brigade, Transport Accident Commission, Victoria Police, and WorkSafe Victoria; non-government organisations including the Cancer Council, Diabetes Victoria, Heart Foundation, Move, and the YMCA; and large private providers including Allianz Australia Workers' Compensation (Victoria) Limited, Belgravia Leisure, CGU Workers Compensation (Victoria) Limited, EML VIC Pty Ltd, Gallagher Bassett Services, Workers Compensation Vic Pty Ltd, Ipar, Max Solutions, Nabenet, Rehab Management, The Sports Injury Clinic, and Xchanging; and Victorian universities that offered approved 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 means that the data may not be representative of the profession.
- The focus group participants were invited from the AHWQ2 respondents who agreed to be followedup. This may have resulted in selection bias as only 36% of all survey respondents agreed to further follow-up.

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
430	119	Group 1 – 1 participant
		Group 2 – 4 participants
		Group 3 – 0 participants (early career)
		Group 4 – 3 participants
		Individual interviews – 1

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 430 exercise physiologists completed at least one question on the survey and submitted their survey. Although there is no definitive data source on the total number of exercise physiologists in Victoria, this response rate represents 50% of the 852 AEPs in Victoria (ESSA, 2017a) at the time of the survey and a little over double the headcount of 208 exercise physiologists employed in Victorian public health services (Victorian Public Service Commission (VPSC), 2016). The survey was completed² by 233 individual respondents. The range of respondent numbers to an individual question was from 88 to 1,879. 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 119 employers or managers of exercise physiologists completed the AHWQ2. The organisations they represented employed a total of 239 equivalent full time (EFT) exercise physiologists, with a range of 0.7 to 30 exercise physiologists employed by a single organisation. Of the 119 organisational respondents, 94 were exercise physiologists and 25 were not.

² 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.

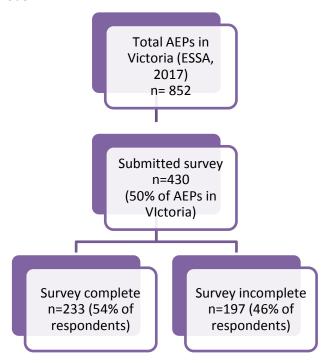
Table 2: AHWQ2 respondents compared to other data sources

EP - Exercise Physiologists

Demographics	AHWQ2		ESSA All Victoria (2017) ³	EPs	EPs ^a VPSC (2016) ⁴	
	na	%	n	%	n	%
Female	233	64	460	54	148	71
Aboriginal and / or Torres Strait Islander	0	0	0	0	-	-
Australian citizen / permanent resident	358	98	-	-	-	-
Age 55 and over	10	3	15	2	6	2
Age 35 and under	267	74	653	77	185	89
Median age (years)	30	-	-	-	-	-

a based on number of respondents to each question in the demographic section of the survey

Figure 2: Survey responses



 $^{^{\}rm 3}$ AEPs, including members and non-members of ESSA.

⁴ Active employee data sourced from the 2016 Victorian Public Service Commission – public health services (hospital) workforce dataset. Data provided by the Department of Health and Human Services. Excludes data for Calvary Health Care Bethlehem, Mercy Public Hospitals, Mildura Base Hospital, and St Vincent's Health (Public). Dataset is based on payroll classification, not necessarily based on role. Data provided by Victorian Department of Health and Human Services.

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

- Seventy-four per cent (74%, n=267) of respondents were 35 years and under, with an age range of 22 to 60 years.
- Most respondents (69%, n=171) were from metropolitan regions. Just over a quarter (26%, n=64) were from regional areas and only 5% (n=14) were from rural areas and remote areas.
- The private sector was the most prevalent employment sector (48%, n=136).
- Sixty-eight per cent (68%) of respondents were in permanent employment and nearly a quarter (24%, n=53) were in contract positions.
- Concerns were expressed regarding the lack of job opportunities relative to the number of graduates, the insecurity of employment options, and the need for some exercise physiologists to work as AHAs in the absence of secure exercise physiology roles.
- The majority (95%, n=234) of respondents said a normal working week involved working Monday to Friday during the day. On average, respondents worked 32 hours per week in their main role.
- Eighty-eight per cent (88%, n=182) of respondents were employed at a junior or intermediate level (grade 3 or lower).
- No respondents reported working with children under 5 years and very few reported working with children aged 5 to 12 years (2%, n=9) or 13-17 years (5%, n=19). Adults 65 to 79 years was the age category that the highest number of research participants reported working with (43%, n=167). Eight per cent (8%, n=32) indicated they worked across all age groups.
- On average, respondent caseloads included 7% of people from Aboriginal and / or Torres Strait Islander backgrounds and 27% from culturally and linguistically diverse backgrounds.
- The most prevalent service delivery settings were a medical centre or private practice facility (27%, n=69) and hospital inpatient / outpatient (23%, n=59), followed by community health centres (16%, n=40) and fitness centres or gyms (14%, n=36).
- The majority (88%, n=229) of individual respondents reported working with musculoskeletal issues. Overweight and obesity (75%, n=195), metabolic issues (74%, n=192), and cardiovascular issues (73%, n=189) were other areas of work of a high proportion of respondents. Working with musculoskeletal issues was the most common primary area of focus (39%, n=102).
- From 2010 to 2017 the number of exercise physiologists gaining AEP status with ESSA increased by 76% from 67 to 118 (ESSA, 2017b). However, the number of domestic students graduating from courses meeting prerequisite requirements for AEP status, reduced by 72% from 442 to 122. The reduction reflects introduction of more stringent training requirements for eligibility for AEP status.
- Across their careers, the cohort showed a reduction in the proportion working in private practice from their first position (44%, n=103) to their current position (38%, n=108) and an increase in those working in the State public sector (18%, n=41 to 24%, n=66) and the Commonwealth public sector (6%, n=15 to 11%, n=32). It is not clear if this reflects a chosen career trajectory for exercise physiologists or whether it represents changes to service funding models over time.
- Most respondents (75%, n=282) reported an intent to stay in the profession for six (6) years or more.
- Nearly a quarter (23%, n=83) of all respondents earned less than \$40,000 and 68% (n=235) earned less than \$70,000.
- The majority (85%, n=34) of organisations reported that advertised junior positions received between
 one and 20 applications. However, three organisations received more than 50 applications for junior
 positions. Applicant numbers for intermediate and senior positions were typically lower, however some
 organisations still received between 11 and 20 or 21 and 50 applications for these positions.
- · Participants expressed frustration at the limitations on working to their full scope of practice, including

the limited opportunities to contribute effectively to prevention of illness and injury given current funding models.

Workforce distribution

Demographics

At the time of the survey, there were 852 AEPs in Victoria (ESSA, 2017b).

As detailed in Table 3 the exercise physiology AHWQ2 respondents were predominantly female (64%, n=233). This proportion is somewhat higher than data provided by ESSA (2017b) which indicated females constituted 54% (n=456) of AEPs in Victoria.

Nearly three quarters (74%, n=267) of the AHWQ2 respondents were aged 35 years and under. This proportion is only marginally lower than the proportion of AEPs in Victoria aged 35 years and under (77%, n=653) (ESSA, 2017a). Individuals aged 55 years and over constituted just 3% (n=10) of respondents. This was almost equivalent to the 2% (n=15) of AEPs 55 years and over reported by ESSA (2017b) and exercise physiologists employed in Victorian public health in 2016.

The mean age of exercise physiology respondents on the AHWQ2 was 32 years (range 22 years – 60 years) and the median age was 30 years (Table 3 and Figure 4).

Nearly three quarters (72%, n=272) of respondents were working in Victoria in the week prior to completing the survey and a further 3% (n=13) were in the workforce but on leave. A further 88 (24%) were not in the exercise physiology labour force in Victoria. Of these 88, 62 (16%) were working in another state as an exercise physiologist; one was working overseas as an exercise physiologist (<1%); eight (2%) were working in management, project, or research roles related to AH but not specifically related to exercise physiology; 10 (3%) were looking for work as an exercise physiologist; and seven (2%) were not looking for work as an exercise physiologist.

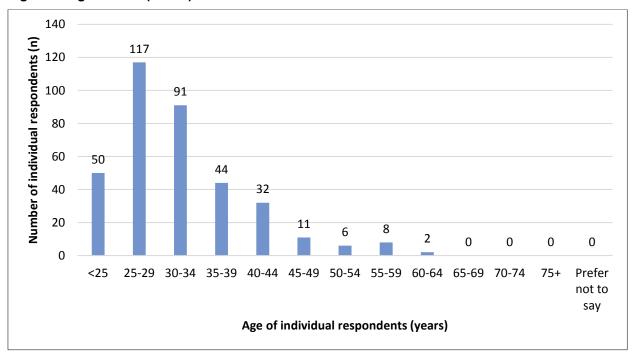
Additional information regarding the current work arrangements of the respondents is presented in the Appendix Table 1, Table 2, and Table 3.

Table 3: AHWQ2 respondent demographics (n=430) compared with ESSA 2017 data and Victorian Public Service Commission 2016 data

Demographics	AHWQ2		ESSA AB Victoria (2017)	EPs	EPs VPSC (2016)	
	na	%	n	%	n	%
Female	233	64	460	54	148	71
Aboriginal and / or Torres Strait Islander	0	0	0	0	-	-
Australian citizen / permanent resident	358	98	-	-	-	-
Age 55 and over	10	3	15	2	6	2
Age 35 and under	267	74	653	77	185	89
Mean age (years)	32	-	-	-	-	-
Median age (years)	30	-	-	-	-	-

^a based on number of respondents to each question in the demographic section of the survey

Figure 4: Age in 2017 (n=361)



Geography

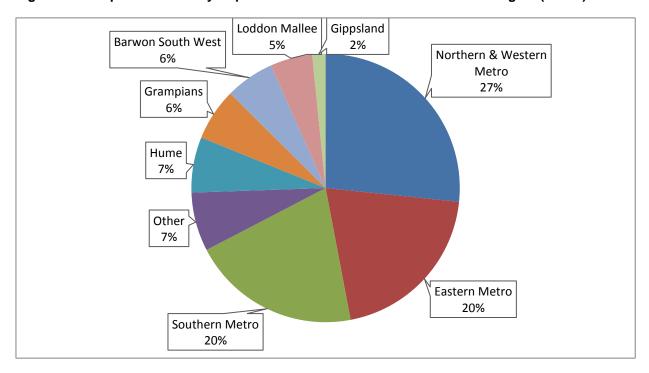
The exercise physiology AHWQ2 respondents were predominantly from metropolitan areas (69%, n=171), including 56% (n=140) who described their main region of work as inner-metro and 13% (n=31) as outer-metro. In combination, regional, rural and remote respondents made up 31% (n=78) of the exercise physiology AHWQ2 respondents (Table 4). Responses were received from exercise physiologists working in each region of the Department of Health and Human Services (Figure 5).

There are no other data sources available that enable an assessment of the representativeness of the geographic distribution of the sample.

Table 4: Region of work (n=249)

Region	%	Count
Inner-metro	56	140
Outer-metro	13	31
Inner-regional	21	51
Outer-regional	5	13
Rural	4	11
Remote	1	3
Total	100	249

Figure 5: Main place of work by Department of Health and Human Services' region (n=255)



Sector

Nearly half of all exercise physiology AHWQ2 respondents were employed in the private sector (48%, n=136), including 10% (n=28) who were employed by large private providers including private hospitals, and 38% (n=108) who were employed in private practice either as a practice owner or employee.

A total of 36% (n=102) were employed in the public sector, including 24% (n=66) in the Victorian public sector, 11% (n=32) in the Commonwealth public sector, and four (4) individuals in local government. A recurring theme within the qualitative data on the AHWQ2 was the need for a significant increase in the employment of exercise physiologists within the public sector. This was framed in two different ways, including the importance of the public health system:

- Responding to the strong evidence base regarding the role of exercise in achieving better health outcomes for people at risk of chronic disease, those experiencing chronic disease and those with acute illness
- Providing workforce and career development opportunities for the exercise physiology profession that are equivalent to other AH professions.

Qualitative feedback suggested that many Victorian exercise physiologists were working in the private sector due to lack of employment opportunities in the public sector. One respondent explained that roles within hospitals are highly sought after but difficult to secure.

Respondents from the NFP sector comprised only 6% (n=17) of AHWQ2 respondents. This was equivalent to respondent numbers from university, higher education or research contexts (6%, n=16) (Figure 6).

"We need greater job opportunities within the public health system. Exercise is the most evidence-based form of therapy for a wide variety of chronic diseases and musculoskeletal injuries and conditions. Therefore, as exercise physiologists are the leading AH professionals in exercise prescription and delivery, the public health system should look to employ their services at a greater rate."

"There's a need for more opportunities for EPs to be involved in public health settings. EPs specialise in chronic disease management and for a health service to not have one exercise physiologist employed is very disappointing when there are significant opportunities in aged care, geriatric evaluation and management, and community rehab."

"Hospital roles are highly sought after. But in the past three years there have only been two full-time exercise physiology positions advertised in hospitals. There have been more in private services, not for profits, and occupational rehab. There are lots advertised in occupational rehab. I wonder if more people are in them and leave them."

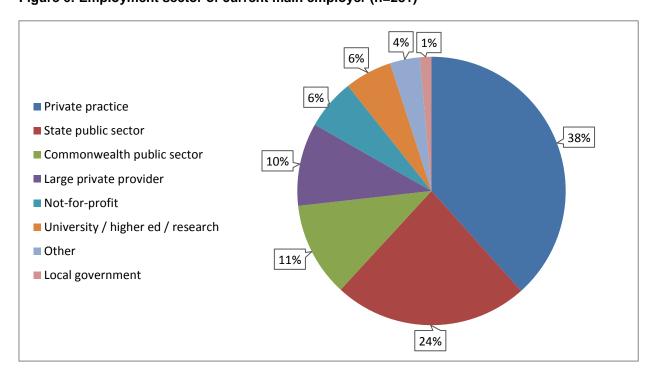


Figure 6: Employment sector of current main employer (n=281)

Clients

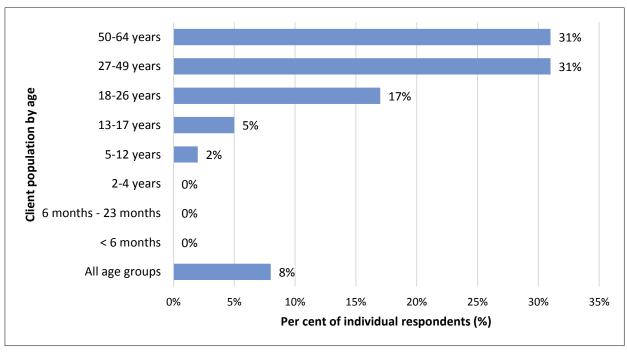
The exercise physiology AHWQ2 respondents predominantly reported working with clients aged 18 years and over. The most frequent age categories were 65 to 79 years (n=167, 43%) and 50 to 64 years (n=161, 31%).

No exercise physiologists reported working with children under 5 years and only nine (2%) indicated working with children aged 5-12 years (Figure 7). A very small number of respondents reported a specific need to increase service provision to children and young people.

"There's a need for recognition of AH / preventative health for people of ALL ages and stages from children / athletes / adults / elderly / disabled."

"We should be more prominent in aged care."

Figure 7: Clients by age (n=386) a



^a Respondents could select more than one response.

On average, respondents indicated that clients who identify as Aboriginal and / or Torres Strait Islander constituted 7% of their caseloads (n=236) and just over one quarter (27%) of their caseloads were people from culturally and linguistically diverse backgrounds (n=250) (Figure 8).

"We need to improve accessibility for people from non-English speaking backgrounds, low SES [socioeconomic status] backgrounds and rural populations."

"I have been working with Aboriginal chronic disease management patients over the past couple of years, with very positive results and the number of hospital presentations decreasing as well as improved chronic disease management...Three years on we are still going with strong retention rates and great weight loss results!"

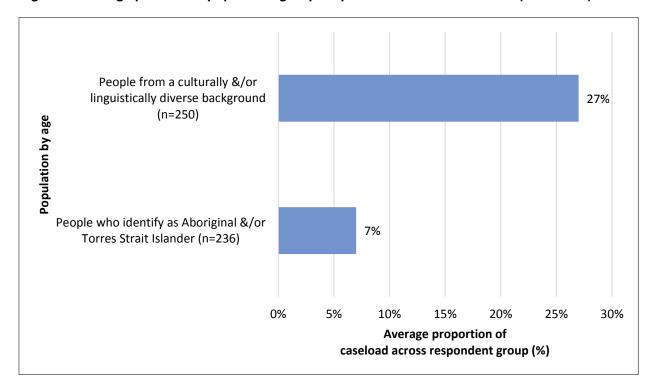


Figure 8: Average per cent of population groups represented within caseloads (n=236-250)

Settings

Over one quarter of AHWQ2 respondents (27%, n=69) indicated a medical centre or private practice facility was the setting for service delivery of their main employer. A similar proportion indicated hospital inpatient / outpatient was their main work setting (23%, n=59). Working within community health centres (16%, n=40) and fitness centres or gyms (14%, n=36) were the next most common locations.

No respondents indicated that their main work setting was in childcare, preschool or school; community locations (e.g. in daily activities); a correctional facility; a residential facility; a residential rehabilitation centre; or using telehealth / online (Figure 9).

"The role of EPs in community health centres should be further emphasised, particularly with chronic conditions and age care."

"There needs to be an increase in employment opportunities within the hospital setting for new graduates – so it's on par with other allied health professions, like physic and OT [occupational therapy], etc."

"I work from various GP [general practitioners] clinics in private practice, but GPs need better understanding of what EPs do so they can educate their patients about what we actually do and who we can treat."

"There are still plenty of areas where EP would be useful. There's a gap between people attending hospital outpatient services like physio and being discharged in the community and being told to find a gym. One pilot project had EP well-integrated into the community and gyms. The program ran programs in and out of hospital, so people weren't lost in the system."

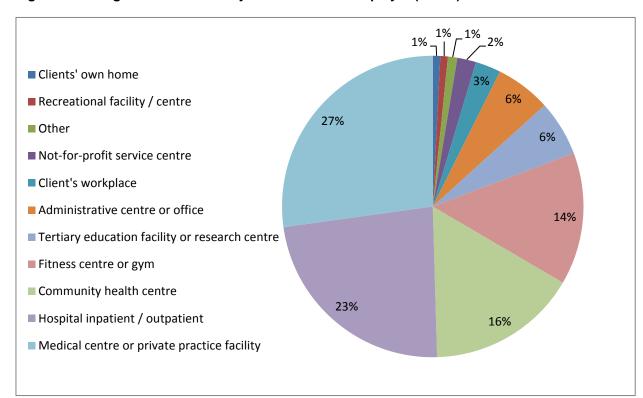


Figure 9: Setting for service delivery of current main employer (n=256)

Area of practice

Nearly nine in every 10 (88%, n=229) exercise physiologists who responded to the AHWQ2 reported working with musculoskeletal issues. Other areas of work of a high proportion of the respondents included overweight and obesity (75%, n=195), metabolic issues (74%, n=192), and cardiovascular issues (73%, n=189). Less frequent areas of focus included palliative care (2%, n=4), reproductive health (8%, n=21), sensory disability (8%, n=20), and renal (13%, n=34).

When participants were specifically asked about their primary area of practice, working with musculoskeletal issues was again the most commonly cited area (39%, n=102). This figure was three times the next most frequent primary area of focus, namely working with metabolic issues (13%, n=34) (Figure 10 and Appendix Table 4).

During the focus group discussions, participants expressed concern about the lack of specialisation in the skills of exercise physiologists. They felt it did a disservice to the profession and the community that so many exercise physiologists promote themselves as being able to respond to all areas of clinical need.

The qualitative responses also revealed perceptions of significant lost opportunities for exercise physiologists to optimally apply their skills to preventing ill-health / maintaining health and wellbeing and assisting those who have recognised risk factors for health issues to arise in the future.

"We can't be an expert in everything. The one thing I do know is neuro rehab."

"I tried my hand at occupational rehab. I learnt very quickly – in 4-5 months – that it wasn't for me."

"I'm constantly being pulled towards our mental health service. They don't have their own EP. Funding is an issue. I can't always do what they want me to do. Having specific EP positions in mental health would be great, both community and hospital."

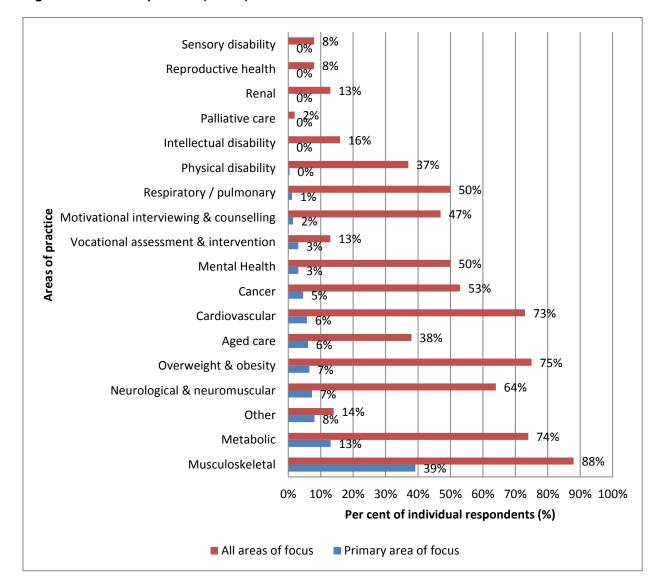


Figure 10: Areas of practice (n=260) a

Funding sources

The funding of exercise physiology services was a very significant concern expressed by respondents to the AHWQ2 and participants of the focus groups. Although professionals who had been practising over an extended period reported that funding opportunities had improved in recent years, a number of issues were identified as still presenting significant issues for the profession. These included:

- The lack of equivalence in rebates for exercise physiology services relative to other AH professions.
 This was reported to be the case across different funding sources including private health insurance,
 Medical Benefits Scheme (MBS), National Disability Insurance Scheme (NDIS) and the Transport
 Accident Commission (TAC) to name a few. A consequence of this situation is that private businesses are more likely to employ individuals from other professions, such as physiotherapy, in the knowledge that higher rebates will be gained.
- Lack of Goods and Services Tax exemption, which when combined with lower rebates, has a
 cumulative impact on the affordability of services to clients and the cost of delivering a service by
 providers.

^a Respondents could select more than one response to signify 'all other areas of practice'

- Lack of recognition that an annual cap of five sessions through the MBS Chronic Disease
 Management Program will not facilitate optimal outcomes in the context of the chronic nature of the conditions the funding is designed to support.
- Lack of rebates to enable service provision to clients with known risk factors for developing chronic conditions.
- Lack of funding to deliver exercise physiology within hospitals, community health centres and other service contexts within the public sector.

"Provider recognition through WorkCover, TAC, DVA, private health insurance and Medicare has definitely enhanced the capacity for work."

"The limited Medicare funded sessions is a problem – five is not enough to help patients with multiple chronic conditions (which is what exercise physiologists treat – chronic conditions)."

"Medicare needs an AH referral to an EP for patients who are at high risk of lifestyle diseases as a preventative measure instead of when they have chronic conditions."

"It's a big discussion point on Facebook that we're listed under 'lifestyle and wellbeing' in the NDIS rather than listed as an AH category. It's quite a troubling point. It's a little about not being recognised because we're being lumped into the same categories as personal trainers. We've been trying to establish ourselves as a qualified, professional body and again we're not being seen as that."

A wide range of funding sources for service delivery to individual clients was identified as being used by respondents to the AHWQ2. Similar usage levels were reported across Chronic Disease Management (MBS) (63%, n=133), self-funding (60%, n=126), private health insurance (59%, n=124), WorkCover (59%, n=124), TAC (57%, n=120) and Department of Veterans' Affairs (DVA) (56%, n=118). Just over a quarter of respondents (27%, n=57) reported that their clients were accessing funding from the NDIS. However, this figure is likely to increase once the NDIS is fully rolled out across Victoria (Figure 11).

On average, individual exercise physiologists reported using five different funding sources to support service deliver to individual clients.

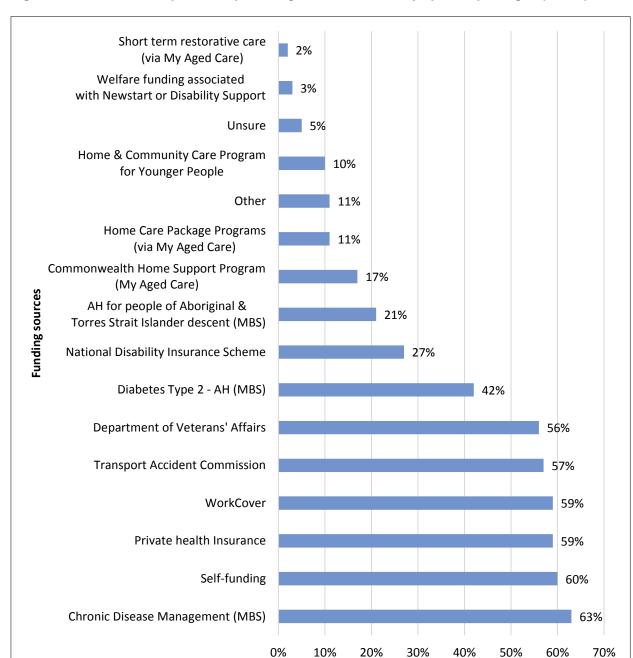


Figure 11: Per cent of respondents providing services funded by specific packages (n=211) a

Per cent of individual respondents (%)

^a Respondents could select more than one response.

Demand

The organisational and individual respondents to the AHWQ2 did not provide any quantifiable measures of demand for exercise physiologists. However, the AHWQ2 asked organisational respondents whether there is any evidence of workforce shortages for exercise physiologists. Of the 75 organisational respondents who answered this question, nearly a third (32%, n=24) indicated there was evidence of shortages, nearly a third (32%, n=24) indicated there was no evidence, and just over a third (36%, n=27) indicated they did not know. Of the 25 respondents who reported evidence of workforce shortages, the most frequent impacts cited were:

- reduced client access to services (76%, n=19),
- increasing pressure on professionals (64%, n=16),
- and reduced breadth and / or depth of services relevant to meeting client need (56%, n=14)

The findings above were derived from a question asked specifically of organisational respondents, rather than individual exercise physiology respondents. When the total dataset regarding workforce supply was considered (including organisational and individual respondents) a more complex picture emerged. Responses highlighted barriers that limit the existing workforce from meeting the significant community need for exercise physiology services, rather than the lack of a workforce. These barriers included:

- poor awareness of the scope of practice and evidence base for exercise physiology amongst professionals and the community,
- models of care and funding arrangements with a limited focus on prevention and early intervention,
- · inadequate funding of exercise physiology roles

"There needs to be increased knowledge of the key skills of the exercise physiology profession being provided to the wider medical community, as exercise is proven to be a crucial part in the prevention, treatment and ongoing management of most chronic and complex conditions."

The Australian Government, Department of Employment's *Job Outlook* initiative does not include exercise physiology.

Supply

There are a number of factors that interact with and influence the supply of exercise physiologists. These include the size of the current exercise physiology workforce, the number of graduating exercise physiologists over time, the age and gender profile of the workforce, employment grades, remoteness, remuneration and local approaches to recruitment.

Exercise physiology workforce

At the time of the AHWQ2 survey, there were 852 AEPs in Victoria (ESSA, 2017a).

In recent years the pre-requisite qualifications for eligibility to apply for AEP status have changed:

- Before 2012, AEP applicants needed to have completed an Australian Qualifications Framework Level 7 three-year bachelor degree in exercise and sports science or a related field.
- From 2012 to 2014, AEP applicants needed to have completed an Australian Qualifications
 Framework Level 7 four-year bachelor degree in exercise and sports science or a related field.
- Since 2015, AEP applicants have been required to have completed either a four-year full-time bachelor degree or a two-year full-time graduate-entry master's degree from an ESSA accredited course (ESSA, 2017a).

From 2010 to 2017 the number of exercise physiologists gaining AEP status with ESSA increased by 76% from 67 to 118 (ESSA, 2017b). A peak in new AEPs was evident in 2014 just prior to changes to qualification requirements. These numbers include a combination of new graduates and individuals who

were eligible for, but had not previously sought AEP status. With new standards in place, in 2016 and 2017 the number of new AEPs plateaued to a level similar to that in 2012 (ESSA, 2017b) (Figure 12).

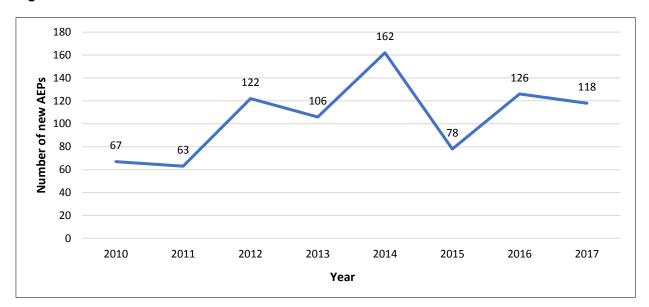


Figure 12: Number of new AEPs from 2010-2017

Source: ESSA, 2017b

Student completions

In 2016, 122 exercise physiology students completed training at a Victorian tertiary education facility that gave them eligibility for AEP status with ESSA (unpublished data, Department of Education and Training⁵). Reflecting the progressive changes in eligibility requirements for AEP status between 2012 and 2015, there has been a 72% decrease since 2010 when 442 students graduated with a qualification that provided eligibility for AEP status (Figure 13).

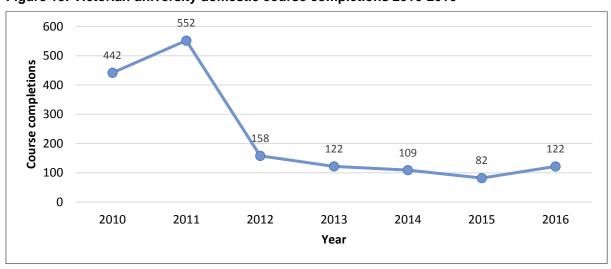


Figure 13: Victorian university domestic course completions 2010-2016

Source: Department of Education and Training

⁵ 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.

Workforce oversupply / job shortages

On the AHWQ2, nearly forty per cent (39%, n=90) of individual respondents agreed with the statement that 'there are too many new graduates in my profession' and a slightly higher proportion (43%, n=99) expressed a neutral opinion on this issue. The qualitative data revealed significant concerns from many respondents about the number of new graduates in the absence of adequate employment opportunities. One focus group participant explained that before enrolling in exercise physiology the university promoted the profession as having strong employment prospects on graduation. In hindsight this respondent felt this information was misleading. He recognised this was not the case at the time of his enrolment and had not changed during his time of study. Another respondent expressed a similar sentiment and explained that if they had their time again they would not enrol in the program.

It is important to note that the research participants did not suggest that the lack of job opportunities reflected a lack of community need, but rather, that funding models did not enable effective use of the available exercise physiology workforce.

"There also needs to be jobs for people who graduate and if EP jobs are not increasing then someone needs to look at the university sector regarding how many people they are putting through their programs."

"There are too many graduates and not enough jobs to sustain them, poor general population knowledge about our profession, poor career progression and pathways into other specialities, and no overseas opportunities to work. Students studying EP degrees were not told these things. If I had my time over again I would not study this degree."

"If I knew what I know now about the exercise physiology profession, I would not have studied to become an exercise physiologist. If you spoke to me six years ago my career goal was to become an EP in a public hospital setting however I feel that this is an unattainable goal due to many factors."

"Please educate students coming through about what is realistic is terms of job opportunities, possible career progression and pathways and poor stability in the workforce."

Unfilled positions

Out of 101 organisational respondents 90% (n=92) indicated that they currently had no unfilled positions (Figure 14).

Of the 10 organisations with unfilled positions, five reported an inability to recruit due to lack of applicants with appropriate skills or experience. This is an interesting finding given feedback from respondents regarding the challenges experienced in gaining employment. The research itself did not shed light on the reasons for these unfilled positions, however, the research program's Exercise Physiology Advisory Group speculated that due to the high number of insecure roles in the exercise physiology workforce, individuals who already have a secure position are unlikely to apply for temporary or contract roles. This is likely to be the case even if the advertised position is at a more senior level. This was said to influence even those exercise physiologists employed as allied health assistants (AHAs) who can be reluctant to apply for an exercise physiology role if it means changing from a secure but lower paid position with a narrower scope of practice to an insecure, higher paid position with the full scope of practice they are trained for.

A further five organisations reported that funding was currently not available for previously funded exercise physiology positions. Qualitative data revealed that exercise physiologists are often employed in small numbers or even in a sole position in a part-time, contract role. Respondents believed this made them particularly vulnerable when cost savings were being sought at an organisational level.

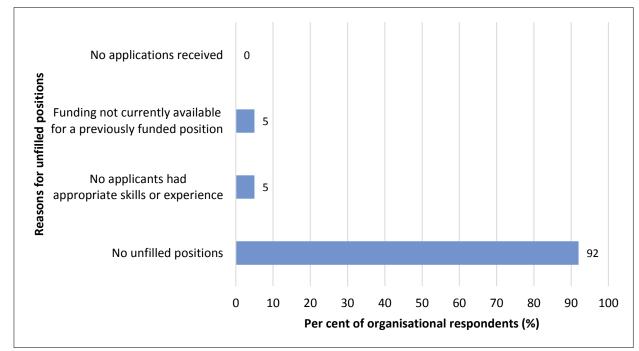


Figure 14: Reasons for unfilled exercise physiology positions (n=101) a

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. With increasing position seniority an increasing proportion of respondent organisations had not advertised any positions, i.e. half (50%, n=40) of the organisations had not advertised any junior positions, 69% (n=56) had not advertised any intermediate positions, and 93% (n=68) had not advertised any senior positions (Figure 15).

There were no organisations that reported receiving no applications for an advertised role and some organisations reported receiving applications despite positions not being advertised.

Of the 40 organisations that reported having advertised junior positions, the majority (85%, n=34) received between one and 20 applications. However, there were six organisations that reported receiving higher applicant numbers, with three of these organisations receiving more than 50 applications for junior positions.

Applicant numbers for intermediate positions were somewhat lower. Fourteen of the 24 organisations that advertised intermediate positions only received between one and five applications. Even so, two organisations received between 21 and 50 applications for positions at this level.

Senior positions were only advertised by six organisational respondents. Of these organisations, four received between one and five applications, one received between six and 10 applications, and one received between 11 and 20 applications (Figure 15).

The findings regarding the decreasing number of applicants for positions of increasing seniority seems inconsistent with the very strong qualitative theme of that the profession has extremely poor career progression opportunities. As noted previously, however, in the context of high levels of insecure employment in the profession, unless a senior position is advertised as a permanent role, potential applicants may be reluctant to take the chance of leaving an existing secure position. Another possible issue is that senior positions are increasingly being advertised as being open to one of a number of

^a Respondents could select more than one response.

professions (e.g. exercise physiology, occupational therapy, or physiotherapy). The research program's Exercise Physiology Advisory Group explained that in these cases exercise physiologists may be less competitive as they may not have had the same opportunities as individuals from other professions in terms of experience filling intermediate level positions.

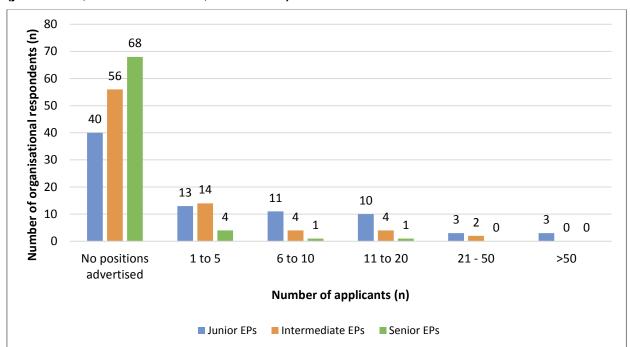


Figure 15: Number of applications received for positions advertised in the past year by level (junior n=80, intermediate n=80, senior n=74) a

Time to recruit

Of the 25 organisations that advertised exercise physiology positions in the preceding 12 months, all but one organisation that advertised junior positions (96%, n=20) filled the positions within 10 weeks and the majority (73%, n=19) filled within five weeks. One organisation took 31-52 weeks to fill a junior position. Similar to junior positions, 82% (n=15) of organisations filled intermediate positions within 10 weeks. However, one organisation took more than 52 weeks to fill an intermediate position (Figure 16).

Although only seven organisations advertised senior positions in the prior 12 months, these positions were not filled as quickly. The time to fill these roles ranged from zero to five weeks through to more than 52 weeks.

Where recruitment took an extended period, the research findings do not shed light on whether this was due to process issues (such as a delay in advertising or a protracted selection process) or whether there were difficulties attracting professionals to the role.

^a Respondents could select more than one response.

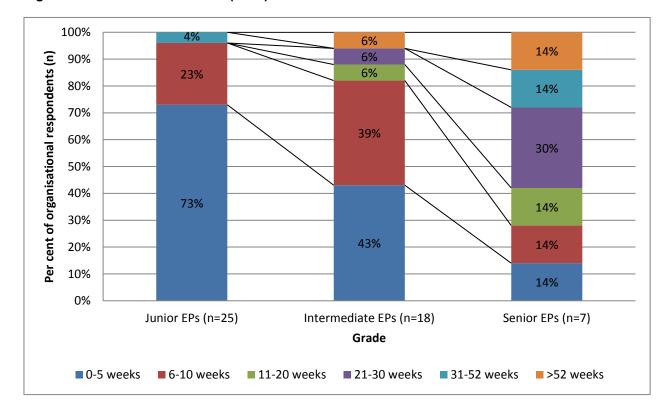


Figure 16: Time to fill vacancies (n=25) a

Recruitment strategies

Forty seven (47) organisational respondents answered the AHWQ2 questions relating to the different recruitment strategies they use. SEEK or other online recruitment (n=31), internal advertising (n=30), word of mouth (n=29) and organisational / employer websites (n=26) were the strategies used by the greatest number of organisational respondents. Only a small proportion of organisations reported use of recruitment consultants / agencies (n=7) or local media such as newspapers (n=7).

Strategies most likely to be identified as extremely successful were SEEK or other online recruitment (52%, n=16), student placements (43%, n=9) and word of mouth (38%, n=11). Internal advertising was the strategy most likely to be reported to be unsuccessful (20%, n=6) by those who had used the strategy (Figure 17).

^a Although 25 organisations responded to this question, data is only included for organisations that indicated they had vacancies in the prior 12 months.

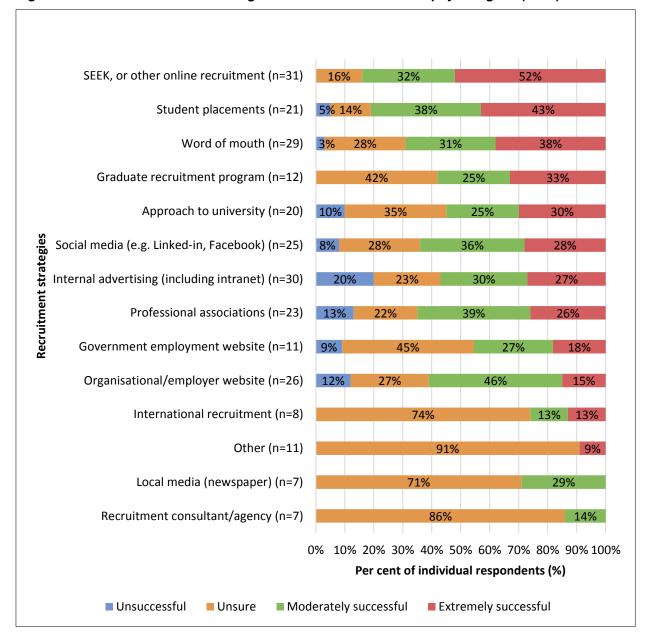


Figure 17: Relative success of strategies used to recruit exercise physiologists (n=47) a

Retention

Exercise physiology respondents to the AHWQ2 were asked about their intention to remain in their current work situation. Of 235 respondents to this question, 11% (n=25) indicated an intention to remain in their current role for less than one year; 3% (n=6) indicated an intention to remain in their current sector for less than one year; and 1% (n=2) indicated an intention to remain in their current profession for less than one year. Although no quantitative data is available, focus group participants explained that because of the limited supply of secure exercise physiology roles, turnover within the profession is low. Once an individual secures a stable role with adequate hours for their circumstances they are typically reluctant to move on.

^a Although 47 organisations responded to this question, for each recruitment strategy data is presented based on the number of organisations that reported use of the strategy. For some strategies, such as 'international recruitment', 'local media', and 'recruitment consultant / agent' a high proportion of respondents indicated they 'do not use' the strategy.

When considering the longer term, most exercise physiology respondents indicated an intention to remain in the profession for more than 10 years (55%, n=129). Interestingly, compared to other locations, respondents from rural areas were the most likely to have an intention to remain in the profession for more than 10 years (91%, n=10). Across sectors, this ranged from 69% (n=9) for those in the university / higher education sector to 36% (n=10) for those working for a large private provider.

Although 38% (n=88) of exercise physiology respondents indicated they were likely to be working in the same sector for more than 10 years, only 14% (n=33) expected to be in their current role within this timeframe (Figure 18).

"People in our profession are relatively young, so the senior people aren't moving on or retiring. EPs in hospitals are in their 20s. They're not going to leave for decades."

"Attrition comes down to career development and whether we have clear pathways to follow and we don't burn out because we're not in the same stale mate for a long time. That's common across the board. There are two very different issues — once you get your foot in the door, is it going to lead onto a career path? It's just that there's only so long you can stay at the grade 1 level before you're wanting more out of your career. I think that would be the most common thing I see for attrition or why people go and reskill to go in another direction."

"I absolutely adore working in community health, however I do live with the constant worry that funding will disappear, and I won't be able to continue. It would be amazing to have more job security around my role as an Accredited Exercise Physiologist."

"My big concern is, how are we going to retain this cohort, the current workforce? There is a big gap between the clinical experience that comes with 10 years of practice and where people reach at 30 years of practice. There's a massive gap. How can we keep these clinicians in the profession? Looking at the history of where we've come from, it's growing, but we still need to keep people in there."



Figure 18: Intention to stay in current role, sector and profession (n=235)

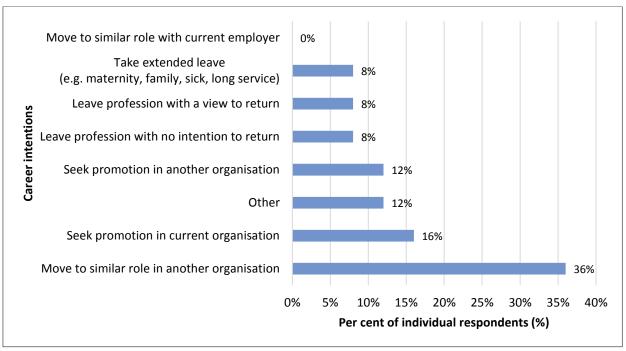
The 25 respondents who indicated an intention to change their role in the next 12 months cited a range of intentions for their intended change. The most common plan was to move to a similar role in another organisation (28%, n=9), followed by seeking a promotion in their current organisation (16%, n=4) and seeking a promotion in another organisation (12%, n=3) (Figure 19).

When discussing the issue of attrition and retention within the focus groups, most participants indicated that they were unlikely to remain in a clinical role over an extended time. Despite acknowledging this perspective, on the most part they were not clear what direction they would take. Some participants articulated the need for the profession to diversify into public health, and health governance and policy, but they indicated they were unclear of the pathway to achieve this.

"I can't see myself doing this job forever, but I don't know what I want. What's available I'm not sure either. The policy and public health side of things is where we need to think about moving as a profession."

"I would like to stay in EP for a little while. I would like to progress my career. But I think I'll get to the point that clinically I probably don't want to continue, and I'll want to make that transition. In 5 or 10 years when I've made that progression and things have settled I might like to make that side step. It seems to be a big thing here – physios, OTs, speechies, dietitians – there've been lots of lunchtime conversations. No one has answers. People are thinking of becoming sales reps, flight attendants, fire fighters. Just totally different things because they can't find links between the work they're doing now in hospitals and what else they can do."

Figure 19: Career intentions of respondents indicating an intention to stay in their current role for 12 months or less (n=25)



When asked about the reasons for changing roles, AHWQ2 respondents were offered the opportunity to select more than one possible reason. The most prevalent reasons were for a better job opportunity (13%, n=11), looking for a change / broadening experience (12%, n=10), better pay (11%, n=9), a long commute (9%, n=8), and their current role not being challenging (8%, n=7) (Figure 20).

"There's a high dropout rate in the public sector due to very limited chance of career progression and small wage growth."

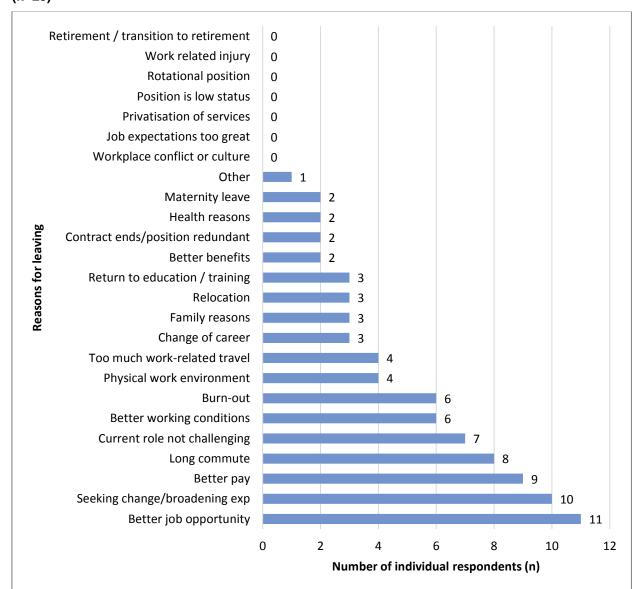


Figure 20: Reasons for leaving (respondents indicating intention to remain for <12 months) (n=25) ^a

At the organisational level, 67 respondents reported specific barriers to the recruitment and retention of exercise physiologists. Most of their responses reflected that the applicants were not experienced enough for the role (24%, n=16), or that there were not retained due to a lack of available career progression opportunities (22%, n=15) or pay levels (22%, n=15). Other reasons for difficulties included other AH professions offer better pay and conditions (13%, n=9), short term contracts (12%, n=8) and poor organisational culture (12%, n=8) (Figure 21).

^a Respondents could select more than one response.

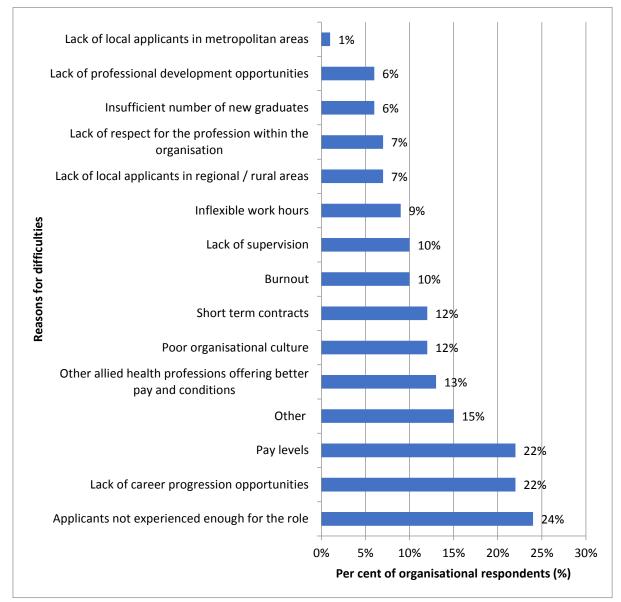


Figure 21: Employer reasons for recruitment and retention difficulties (n=67) a

^aRespondents could select more than one response.

Organisation of the workforce

Pay level

The annual before tax income of exercise physiologists responding to the AHWQ2 ranged from less than \$40,000 to more than \$150,000. The median annual earnings were between \$60,000 and \$69,999.

Nearly a quarter (23%, n=83) of all respondents earned less than \$40,000 and 68% (n=235) earned less than \$70,000 (Figure 22).

When considered by sector of employment, the average annual income of those employed in the public sector (State, Commonwealth and Local Government / Council) was higher than those in the private sector (private practice employee or subcontractor, large private provider, and private practice owner). Just over three quarters (77%, n=74) of private exercise physiologists earned less than \$70,000 compared to 58% (n=50) of public sector exercise physiologists.

Only 39% (n=89) of individual respondents agreed that their grade and / or salary was appropriate for the work they do. Across the different sectors, the university / higher education sector included the highest proportion of respondents who agreed that their grade and / or salary was appropriate (77%, n=10). The employment sectors with the lowest proportion indicating agreement included private practice owners and employees / subcontractors (28%, n=18) and NFP employees (27%, n=4).

Numerous exercise physiologists expressed frustration that their pay level does not reflect the bachelor and masters level qualifications they hold. They also highlighted the lack of pay equity with other AH professionals who hold equivalent qualifications and perform roles with equivalent autonomy and responsibility. This issue was reported to arise not only through discrepancies in rebates for service delivery within private practice service delivery (as outlined previously) but also in pay levels for salaried positions.

Lack of a career structure and the resultant inadequate career progression opportunities were identified as other contributors to low pay levels over time.

"Once you're a contractor, you basically never progress in the form of grade 1 to 2 to 3, you may just be able to change your contactor percentage."

"Salary is a big thing. We're quite well paid in this private hospital compared to the public sector and private practice. It's a big issue why I'm still here and there's the potential to develop further here."

"Going into private practice, I initially went in with big, bold ideas. 'I'm going to change the world'. Then I realised that I was perpetually broke. I was getting just enough clients coming in, but all the money that was coming in was being reinvested to upgrade things I had."

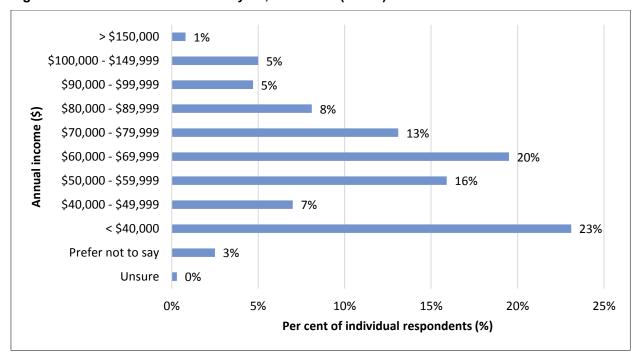


Figure 22: Total annual income last year, before tax (n=359)

Awards

Exercise physiologists are employed under a number of pay arrangements.

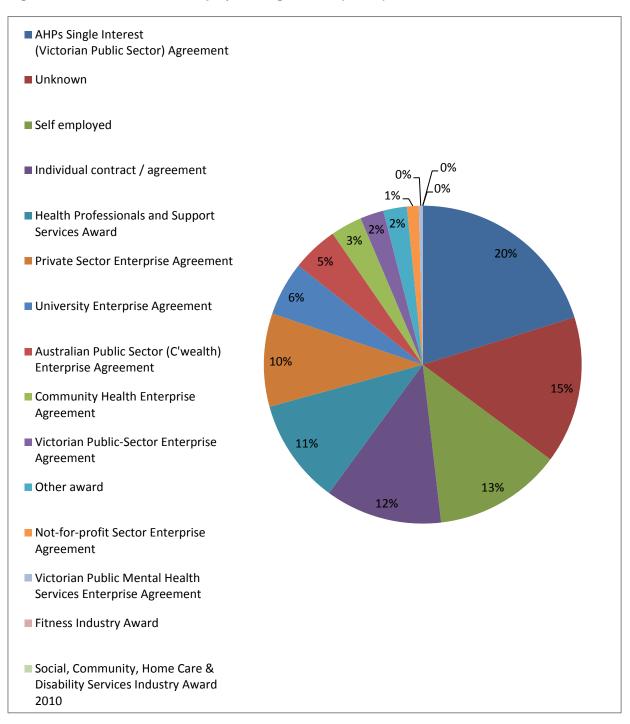
Of the 253 respondents to this question, 13% (n=33) indicated that in their main role they are self-employed. The Allied Health Professionals Single Interest (Victorian Public Sector) was the most prevalent award (20%, n=51), followed by an individual contract / agreement (12%, n=30), the Health

Professionals and Support Services Award (11%, n=27), and the Private Sector Enterprise Agreement (10%, n=24).

The remaining respondents were employed against a range of other awards and employment arrangements. Examples include the Community Health Enterprise Agreement, the Not for profit Enterprise Agreement, the University Enterprise Agreement, the Australian Public Sector (Commonwealth) Enterprise Agreement.

Exercise physiologists who did not know their award or pay agreement constituted a notable proportion of the respondent group (15%, n=38) (Figure 23).

Figure 23: Current award or employment agreement (n=253)



Employment grade / level

Nearly nine in 10 of all AHWQ2 respondents (88%, n=182) reported being employed at either a junior level (grade 1) (38%, n=79) or an intermediate level (grade 2 or 3) (50%, n=103). Respondents in senior level positions (grade 4 or above) constituted just 9% (n=19) of participants (Figure 24).

As noted previously, an important finding of this research was the significant level of concern within the exercise physiology profession regarding new graduates being unable to secure work as an exercise physiologist. In turn, this results in individuals taking on roles as AHAs or in some instances as a part-time exercise physiologist and a part-time AHA. This situation was reported to result in numerous challenges:

- Low pay relative to an individual's qualifications.
- · Lack of career satisfaction due to the inability to work to an individual's full knowledge and skill base.
- Challenges restricting an individual's practice to the role boundaries of an AHA when they have the skills to deliver more than the role description.
- Organisational pressures to work beyond the role boundaries of an AHA when an individual has the skills to deliver more than the role description.
- Development of inaccurate perceptions of the knowledge and skill base of the exercise physiology profession, which compromises the long-term development of the profession within the community.
- Development of a perception that exercise physiologists who work in designated exercise physiology
 roles are not autonomous professionals, which in turn results in other AH professionals assuming they
 can delegate to the exercise physiology workforce.

It should be noted that despite significant concerns expressed regarding exercise physiologists needing to seek employment as AHAs, the respondent cohort to this research only included 10 individuals who were currently looking for work as an exercise physiologist. Five of these individuals were currently working as an AHA. The research did not provide data on the number of participants who had worked as an AHA at any time since graduating as an exercise physiologist, however when asked about jobs prior to qualifying as an exercise physiologist, 27% (n=38/142) of those that had had a prior career stated this was an AHA. It is possible that some of these individuals misunderstood the question and were qualified as exercise physiologists at this time. It is also possible that despite efforts to engage all individuals qualified to work as exercise physiologists the research may have been less successful in engaging exercise physiologists who were not currently employed in a designated exercise physiology role. Further exploration of issues relating to this pattern of employment is warranted.

"For exercise physiologists who are employed as allied health assistants, their EP skills are being utilised (exploited) under this job title and are not getting recognition or pay as an EP. This in turn limits the amount of EP positions available as organisations will only see the need to fund AHA positions instead of EP."

"There are extremely limited job opportunities for new graduates."

"The use of allied health assistants is a major concern because so many graduates are applying for these roles in the hope it's a stepping stone. On our health service there is no stepping stone. Therefore, for years, these qualified EPs are in fact employed as AHAs. Seemingly a restrictive position for a professional who is able to bring so much more into the space. But limited by the scope of practice that an AHA can provide."

"You can go and look at many, many health services and see that EPs are working as AHAs. Probably in doing that we're being a bad enemy to EP. But at the end of the day we need roles to have jobs, to travel, to do things with our family. That's what it comes back to at the end of the day."

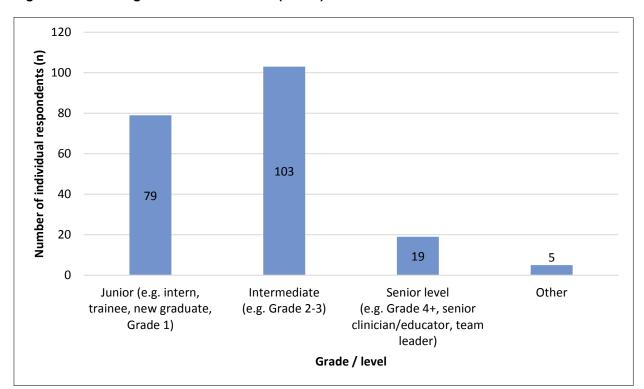


Figure 24: Current grade – non-academic (n=206)

A total of 14 university-employed exercise physiologists responded to the survey. Of these 14, there were four employed at Level A, five at Level B, and three at Level C (Figure 25). There were no respondents employed at the level of Associate Professor or Professor.

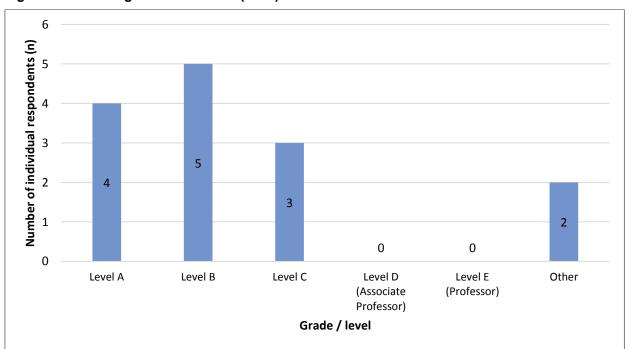


Figure 25: Current grade - academic (n=14)

Employment status

Most exercise physiologists responding to the AHWQ2 indicated they were currently employed in permanent roles (68%, n=150). Nearly a quarter (24%, n=53) were employed in contract positions and 6% (n=12) were employed in casual roles (Table 5).

Table 5: Nature of employment with current main employer (n=219)

Employment status	%	Count
Permanent	68	150
Contract	24	53
Casual	6	12
Temporary	1	3
Voluntary	0	0
Other	1	1
Total	100	219

"We've been able to put a business case in for one day of a grade 3 which will hopefully begin soon to provide governance and structure. My hours will hopefully become permanent part-time. Until now it's been casual between an AHA role and an EP role."

"I would ultimately like to see more full-time positions created – a full-time EP role is extremely rare."

"I've been very lucky to have full-time employment from the beginning."

"Everyone knows how tough it is to land full-time work as an EP."

"Currently there are many exercise physiologists struggling working many part-time / casual jobs to make full-time employment. I feel that this is being ignored."

Number of employers

The majority of exercise physiologists (69%, n=178) had just one employer, just under a fifth (17%, n=45) had 2 or more employers and 14% (n=37) were fully self-employed (Table 6).

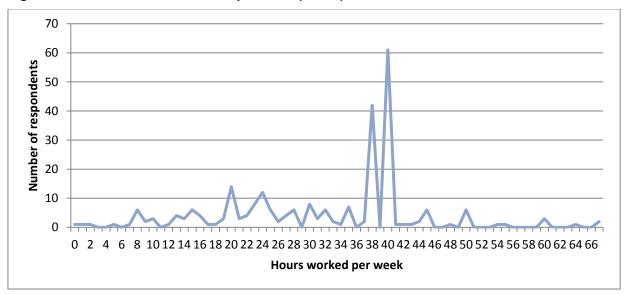
Table 6: Current number of employers (n=260)

Number of employers	%	Count
1	69	178
2	14	37
3	3	8
4	0	0
5 or more	0	0
I am fully self-employed	14	37
Total	100	260

Hours of work

On average, exercise physiologists reported working 32 hours per week in their main role (n=256), with a range of one to 67 hours worked per week. The largest number of respondents (n=61, 24%) worked 40 hours per week and 40% worked between 38 and 40 hours per week. Forty nine per cent (49%, n=127) worked less than 38 hours per week, and 10% (n=26) worked more than 40 hours per week (Figure 26). The average total hours of paid work may be a little higher than this as 17% (n=45) of respondents reported being employed by more than one employer (Table 6).

Figure 26: Number of hours worked per week (n=256)



Just more three quarters of exercise physiologists respondents indicated that in a normal working week they worked Monday to Friday, mostly during the day (77%, n=234). Much smaller proportions of respondents reported working Monday to Friday, mostly at night (10%, n=29) or on a Saturday (9%, n=28). Only a very small proportion reported that a normal working week involved working on a Sunday (1%, n=10) or that their shifts changed from day-to-day or week-to-week (3%, n=10) (Table 7).

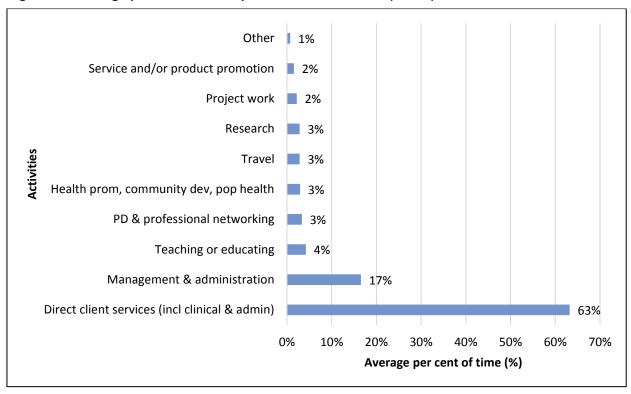
Table 7: Working pattern during a normal working week (n=305)

Working pattern	%	Count
Monday to Friday (mostly day time)	77%	234
Monday to Friday (mostly night time)	10%	29
Saturday	9%	28
Sunday	1%	4
Shifts that change from day-to-day, or week-to-week	3%	10
Total	100	305

Roles

On average, AHWQ2 respondents spent more than half of their time (63%) on client related activities. The average time spent on other management and administration was substantially less than this at 17%. When averaged across the respondents, teaching, research, project work, professional development and travel accounted for only a small proportion of time (Figure 27).

Figure 27: Average per cent of time spent on work activities (n=248)



Scope of practice

Full scope of practice

Many exercise physiology respondents expressed concern arising from the inability to work to their full scope of practice. A frequently cited reason was the lack of understanding of the exercise physiology role by funders, service managers, other health professionals and the community. However, another significant reason was identified as the lack of understanding of the distinction between the roles of physiotherapists, exercise physiologists and personal trainers. Exercise physiologists explained that in many organisations physiotherapists undertake roles that exercise physiologists are more appropriately

qualified and skilled to fulfil. In the context of exercise physiologists often being managed by physiotherapists this can be a difficult issue to resolve. Exercise physiologists also expressed concern regarding personal trainers working beyond their scope of practice when providing services to clients with risk factors arising from complex chronic disease and other medical conditions. Some exercise physiologists explained that they felt like 'glorified personal trainers' despite their knowledge and skills.

"I work in a physio department in a public hospital. We don't always have the freedom to pursue areas of interest due to physios working in that area or senior management not agreeing that there is a need to service that particular target market."

"Sometimes we're treated like a glorified personal trainer with no capacity to fill a higher role...but this is changing now, however."

"There are lots of people off the street accessing local leisure centres who have health conditions who aren't always well monitored by the personal trainers or the fitness staff at the gym. EPs in those spaces would be great."

Prevention and early intervention

Contributors to the AHWQ2 and focus groups reinforced the key contribution the exercise physiology profession can make to prevention of injury and illness, including the prevention of chronic disease. Although the profession is clearly making contributions to these outcomes through existing funding and roles, responses demonstrated frustration at the limitations on contributing to the profession's full potential despite the high need in the community. Issues affecting the profession's capacity in this regard were identified to include:

- Inadequate attention to prevention and early intervention by GPs, despite clear research evidence regarding the importance of physical activity.
- Inadequate understanding of the role of exercise physiologists by professionals and the community.
- Lack of rebates for clients at risk of chronic disease, in contrast to funding available for those with established chronic disease, disability or injury.

"Exercise physiologists, when utilised properly, reduce the load on other professionals by keeping people healthy, out of hospital, and empowering them to move and exercise for life."

"Funding for many non-evidence based practices...could be better diverted to early lifestyle interventions as preventative care and active rehabilitation that incorporates self-empowerment, as opposed to passive interventions which create patient reliance on continual servicing."

"There seems to be no urgency for growth or funding in our profession in public health despite our work in preventative medicine."

"Managers / leaders in hospitals don't seem to be aware of the exercise physiology scope of practice and the role it can play in preventing readmissions and fostering patient self-management."

"I would like health funds, doctors etc. to recognise EPs as an integral part of the health system to decrease symptoms of chronic conditions such as heart disease and diabetes as well as offer a positive solution to obesity and significantly help people with musculoskeletal problems. Also, to keep older adults in their home longer, decrease risk of falls and help assist the elderly to have a better quality of life by keeping them mobile and able to continue with their normal activities of daily living."

Advanced practice

The following definition of advanced scope of practice was used in the AHWQ2

Work that is currently within the scope of practice for your profession, but that through custom and practice has been performed by other professions.

The Department of Health and Human Services did not have any recognised advanced practice roles for exercise physiologists at the time of this study. Instead, respondents were asked what activities might constitute relevant advanced roles for exercise physiologists who have the appropriate training and competency. Responses covered a very broad range of roles, including:

- Education in diverse health conditions, public health and workplace health and fitness.
- Screening and assessment across a range of physiological, functional and behavioural domains, including cardiopulmonary function testing, VO₂ testing, blood glucose testing, spirometry, cardiac sonography, electrocardiogram monitoring, pre-anaesthetic assessment, metabolic assessment, mobility and gait assessment, pelvic floor assessment, psychometric testing, return to work assessment, medical clearance for exercise, ergonomic assessment, pre-employment medical screening, and medico-legal screening.
- Exercise intervention for individuals accessing acute care for cancer, metabolic conditions, renal disease, musculoskeletal conditions, pain management etc.
- · Peri-operative exercise programming.
- Musculoskeletal diagnosis and manual therapies such as trigger point release, joint mobilisation, myotherapy, and neural mobilisation.
- · Prescription of gait aids and mobility retraining.
- Advanced neurological rehabilitation and post-concussion rehabilitation.
- Mental health case management, counselling and support, cognitive behavioural therapy, and acceptance commitment therapy for individual with chronic disease.
- · Ultrasound.
- Referral for and interpretation of relevant imaging.
- · Prescription of relevant medications, oxygen, and equipment.
- · Triaging in hospital emergency for chronic disease.
- · Nutrition advice.
- · Robotic assisted rehabilitation.

Feedback from the research program's Exercise Physiology Advisory Group suggested that many of the examples provided would not necessarily be defined as advanced practice. It should be noted, however, that across this Advisory Group there was inconsistency in what they identified from the list as advanced practice.

An important consideration is that across the AH workforce the concept of advanced practice is defined in a range of ways. In contrast to the definition above, ESSA defines advanced practice as "demonstrated evidence of increased skills, reasoning, knowledge and experience leading to expert status in one or more areas of exercise and sports science practice" (ESSA, 2017c). Although some of the examples provided by respondents may not meet the definition used by ESSA, they may in fact meet the definition used in this research which makes a point of advanced scope being related to work that is within a profession's scope of practice, but through custom and practice has been performed by other professions. Based on other findings from this research, where many respondents felt the tasks of an exercise physiologist are frequently filled by other professions, some of the responses offered may indeed fit the definition used in this research.

Allied health assistants (AHA)

A little more than one third (37%, n=88) of exercise physiology respondents reported that their work involves supervision of and delegation to AHAs. This was most likely to be the case for those employed

in the public sector (67%, n=54), large private providers (61%, n=17) and NFP organisations (60%, n=9) (Appendix Table 5).

Telehealth

Use of telehealth and other forms of technology for remote or virtual service delivery was reported by 15% (n=36) of individual respondents (Appendix Table 5). They reported use of telehealth to deliver services to people in regional, rural, and remote locations and in circumstances where clients are not able to access services in person. The modes of telehealth described by respondents included videoconferencing, teleconferencing, and email. Respondents also described use of a range of virtual platforms that support service access in the community; examples included Physitrack, MedBridge, Nudge, and Hudl.

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

- · Providing cardiac rehabilitation
- · Providing exercise advice and prescription
- · Providing Pilates
- · Providing technique analysis
- · Monitoring program progress
- · Participating in specialist appointments
- · Delivering education programs

A small number of exercise physiologists reported using technology for non-clinical purposes including meetings and accessing professional support).

"I use telehealth for cardiac rehab and cancer groups, as well as clinical meetings with specialists."

"I'm involved in the Pilot Project – Telehealth for Supportive Survivorship Care Program that uses education via teleconferences and education at local sites."

"Telehealth is used to minimise regional travel, for discharge planning, and follow up contact."

"I use Physitrack for remote programs."

Workforce movement

To identify patterns in the career pathway of exercise physiologists, participants were asked to provide details regarding their first position, their position prior to their current position, and their current main 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.

Participants were asked about the number of jobs they had held as an exercise physiologist across their career path to date. The majority (69%, n=203) had held three jobs or less, with 29% (n=87) being in their first job, 24% (n=70) having held two jobs, and 16% (n=46) having had three jobs. Only two people (1%) had been employed in 10 jobs or more (Appendix Table 6).

Changes in location

The AHWQ2 data shows that the proportion of respondents working in metropolitan areas was stable across respondents' first position (61%, n=148) and their position prior to their current position (60%,

n=157). A small increase in a metropolitan location was evident between respondents' prior position (60%, n=157) and their current position (64%, n=182) (Figure 28).

Interestingly, respondent employment in regional areas increased from 17% (n=42) to 22% (n=63) between respondents' first positions and their current positions and almost halved for locations outside Victoria but within Australia from 15% (n=35) for their first positions to 8% (n=21) for their current position (Appendix Table 7).

"Being from a rural area I was fortunate to get the best opportunity by introducing services where they were not previously available, and essentially being able to create my own role, which lead to the experience that has served me positively on the move to a metropolitan area."

"The chance to undertake a role in a rural and remote location increased my experience. But this was also with a side of sadness, as I couldn't find a position in metropolitan Victoria and I felt I had to consider regional options."

"My experience as an EP who wants to live in a regional / rural area and work with a complex caseload is that there aren't that many job opportunities or opportunities to progress into more senior roles due to low workforce numbers for EPs within larger health organisations."

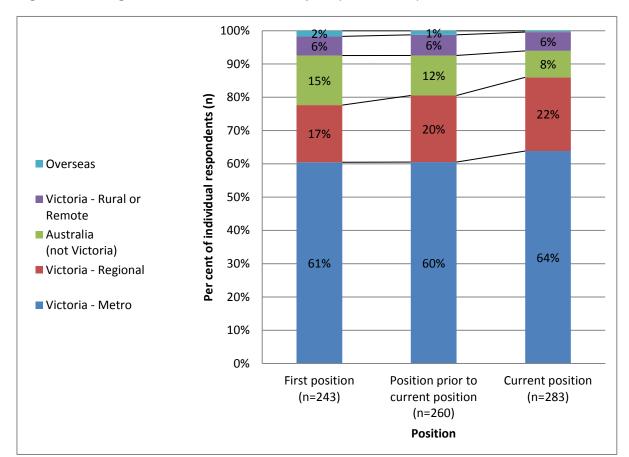


Figure 28: Changes in location across career path (n=243 - 283)

Changes in role

When employed in their first role as an exercise physiologist, 85% (n=197) were employed in roles as clinicians / direct client services. This proportion reduced a little to 78% (n=198) for respondents' immediate prior position and then increased slightly with their current position 80%. Those employed in management positions increased to 9% (n=24) of respondents in their current position with a small number employed in a range of other role types such as teachers / educators (5%, n=14), researchers (2%, n=5), and project officers (1%, n=3) (Figure 29 and Appendix Table 8).

"I currently work as an EP privately as well as working part-time as a research assistant. I feel the combination of these roles has given me more options in terms of my career progression in the future."

"I work in a non-clinical role, currently doing case management and approval and disapproval of treatments."

"I'd like to see a more clear pathway for career progression in the following categories: management and clinical expertise / speciality and paid according to credentials (i.e. masters / PhD / further knowledge)."

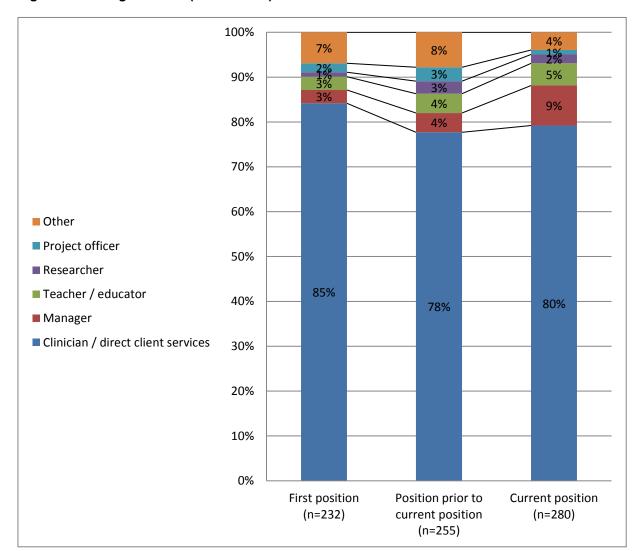


Figure 29: Changes in role (n=232 - 280)

Changes in setting

Figure 30 shows that the proportion of exercise physiologists working in different settings was quite stable across the respondent groups' first position, position prior to current position, and current position.

Private or community clinics and medical centres were the more frequent settings for exercise physiologists to work across these three stages of their career (ranging from 40% to 44%, n=94 -123). This was followed by hospital inpatient / outpatient settings (ranging from 27% to28%, n=62 - 78). For the remaining respondents, a diverse mix of settings was represented, including administrative centre or office, tertiary education / research institute, client's workplace, community locations, residential facility, and unspecified other settings (Figure 30 and Appendix Table 9).

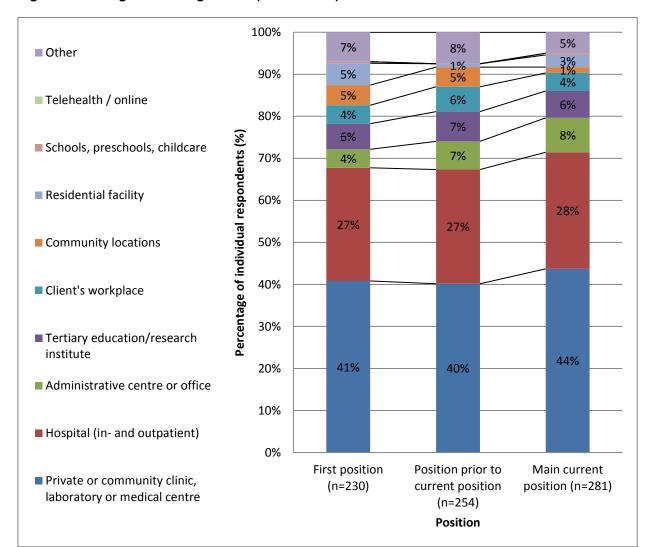


Figure 30: Changes in setting of care (n=230 - 281)

Changes in sector

The most common sector of practice for the cohort of exercise physiologists that responded to the AHWQ2 was private practice. It is interesting that the cohort showed a reduction in the proportion working in private practice between their first position (44%, n=103) and their current position (38%, n=108) and an increase in the proportion of respondents working in the State public sector (18%, n=41; and 24%, n=66, respectively) and those working in the Commonwealth public sector (6%, n=15 and n=32, respectively) (Figure 31 and Appendix Table 10). Although this pattern may reflect changes in employment aspirations across an individual's career it may also reflect increasing numbers of exercise physiology positions within the public sector over time.

"I went into rehab and community spaces. Hospitals and community health. Then I was employed in private practice, but I was sick of paying other people's mortgages. So, I went into my own private practice and academia so I had a balance between a job with reliable pay and a job where you don't get paid if no-one turns up."

"I worked in public health in a rehab service...I worked there for eight and a half years. I've been in a multidisciplinary private practice for the past two and a half years. And I do some guest lecturing at a couple of universities."

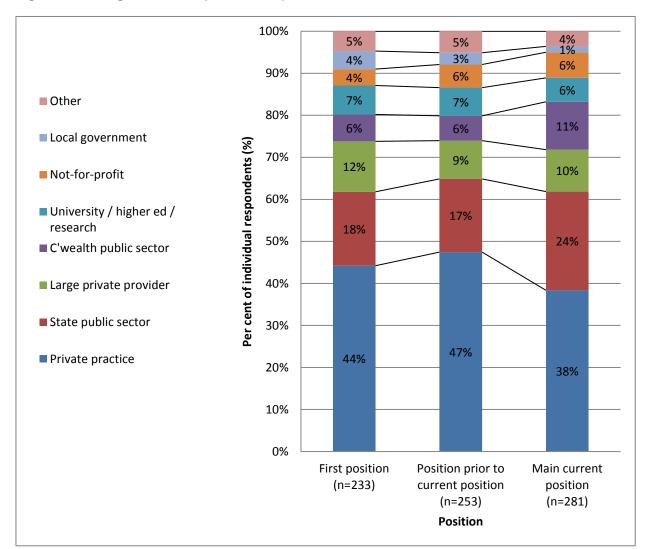


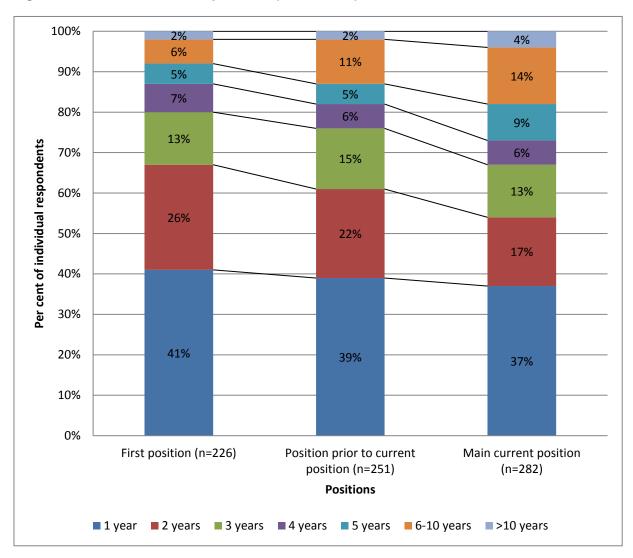
Figure 31: Changes in sector (n=233 - 281)

Years in role

Most exercise physiology respondents to the AHWQ2 remained employed in their first position for no more than three years (80%, n=181), including 41% (n=92) of the total respondent cohort who were only employed for a single year. This pattern was relatively unchanged for respondents' tenure in the position they were employed in just prior to their current position, with 76% (n=190) employed for no more than three years and 39% (n=97) employed for just one year (Figure 32).

There was some evidence of more sustained employment for a greater proportion of individuals in the position they were in at the time they completed the AHWQ2. Those employed for five years increased from 5% (n=13) to 9% (n=24) from the first position to the current position and those employed for six to 10 years increased from 6% (n=13) to 14% (n=40) (Figure 32). Ultimately the figures for the current positions are likely to be under-estimated because the period of employment in this role was not complete at the time of the questionnaire and no doubt included individuals who had just started in their current role as well as those who had been employed for a period of time.

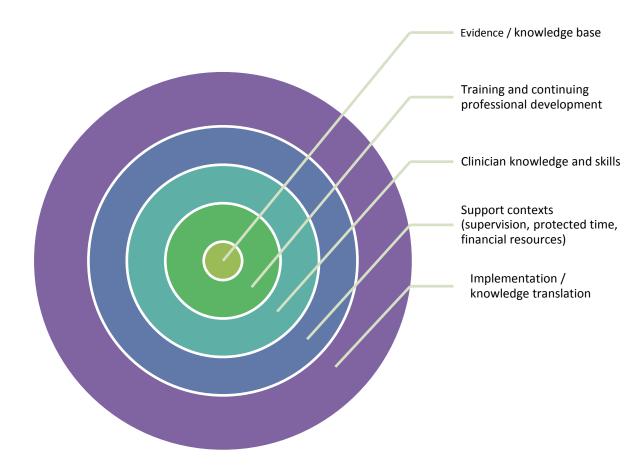




Capability

Capability refers to the strength of the evidence underpinning relevant exercise physiology 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 33).

Figure 33: Workforce capability framework



Key findings

- The respondents emphasised the strong evidence base for the role of supervised exercise, and exercise generally, for maintaining and improving good health. However, they expressed concern that this evidence is not well reflected in current funding models and that exercise physiology is not respected as an evidence-based profession.
- The most frequent qualification that first enabled respondents to practise as an exercise physiologist was a master's degree (42%, n=160), followed by a bachelor degree (30%, n=113), and a graduate diploma (22%, n=84).
- Almost all respondents (99%, n=370) were members of ESSA. A small proportion of respondents were members of other associations such as Fitness Australia and Sports Medicine Australia.
- Most respondents (90%, n=205) said they have the skills needed to complete their work, but only a little over a half agreed they have access to adequate training to progress their career (56%, n=130) and less than a half said they had access to mentorship to support their career growth (39%, n=90).
- Findings indicated the need for greater opportunities to develop skills in specialised clinical areas as well as population health and health policy.
- · Some respondents felt the cost of CPD was too high.
- Only 22% (n=50) agreed that there was a clear career progression pathway in the exercise physiology profession and 38% (n=88) agreed they had a clear career development pathway with their current employer. Significant concerns regarding career progression were also reflected in qualitative responses.
- Examples of facilitators of career progression included personal commitment and investment, CPD and formal study, supportive management, supervision and mentoring, and working in supportive multidisciplinary team.
- Examples of barriers to career progression included lack of a career structure, recruitment of exercise
 physiologists into AHA roles, poor awareness of the exercise physiology role and scope of practice,
 lack of recognition of exercise physiologist as autonomous professionals, and employment of exercise
 physiologists into physiotherapy departments.
- The most frequent gaps in clinical skills identified by organisational respondents were musculoskeletal (19%, n=13) and neurological and neuromuscular conditions (13%, n=9).
- The most frequent gaps in management, business and professional skills identified by organisational respondents were business skills and entrepreneurship (34%, n=24), communication and marketing (26%, n=18), and management and administration (24%, n=17).
- Nearly one third (31%, n=77) of exercise physiology respondents did not have an administrative supervisor and just over one third (36%, n=88) did not have a clinical supervisor.
- A formal multi-disciplinary team structure was the most common work arrangement of most participants (62%, n=147).

Evidence / knowledge base

Exercise physiology respondents discussed the overwhelming evidence base for supervised exercise, and exercise generally, for maintaining and improving good health, quality of life and independence, for:

- · The population as a whole.
- · Individuals with risk factors for chronic illness.
- Individuals with existing health conditions including, but not limited to, mental health concerns, cancer, renal disease, cardiovascular conditions, respiratory conditions, neurological and neuromuscular diseases and conditions, diabetes, and musculoskeletal injuries and conditions.

In the context of ever increasing demands on the health system, respondents emphasised the importance of this evidence being reflected in health policy, programs, and associated funding arrangements by government and private insurers. One respondent explained that the gap between research and practice needs to be closed if a genuine commitment to the concept of 'exercise is medicine' is to be established.

Many research participants felt that the status of exercise physiology as an evidence-based profession is not well respected or understood by other health professionals or by funding bodies. Participants highlighted that grouping exercise physiology with 'natural therapies' and 'alternative therapies' within private health insurance misrepresents the evidence-based nature of the profession and the interventions delivered.

One respondent explained that an important contributor to their career being advanced is the increasing research supporting exercise as a legitimate form of health maintenance and response to health conditions.

Another respondent explained that significant budget stress within their service has meant that the opportunity to contribute to building the exercise physiology evidence-base has been limited.

"Physical activity has gained importance with research proving the benefits of preventing illness and the benefits of maintaining health. More can be done to promote this to GPs and the general population."

"I'll be continuing to push for exercise physiology to become a more significant player in the allied health field – the population is ageing, the evidence supporting the effect of exercise on quality of life and independence is mounting, and the demand on our health care services is increasing the importance of exercise physiologists in all health-related fields."

"In a field where the majority of rehab is structured exercise it is unbelievable there are so few exercise physiologists employed. Patients are missing out! Also, there is overwhelming evidence of the benefits of supervised exercise to other populations such as cancer, diabetes, stroke, renal. There are still very few exercise physiologists employed in the public health sector to help these patients have access."

"An AEP should not fall under 'natural therapies', as we are an evidence-based industry, an allied health professional that should be recognised on the same level as a physio."

"We need to establish "Exercise is Medicine" by closing the gap between research and practice in the health sector."

Training and continuing professional development

Prior work experience

Approximately half of respondents (49%, n = 139/281) had no prior profession or role before becoming qualified as an exercise physiologist. The remaining respondents (51%, n=142) had worked in another profession or role full-time for more than 6 months before entering exercise physiology, with just over a quarter having worked in as an AHA (27%, n=38/142), and 42% (n=60/142) had worked as a personal trainer or fitness coach. For those that had worked in another role or profession, the average number of years worked was five.

Qualifications

Respondents were asked to identify all the vocational and tertiary qualifications they held at the time of the survey, as well as the qualification that first enabled them to practise as an exercise physiologist, and the qualifications they are currently studying.

The first qualification that enabled respondents to practise as an exercise physiologist a master's degree was the most prevalent (42%, n=160) was most prevalent, followed by a bachelor degree (30%, n=113),

and a graduate diploma (22%, n=84) (Figure 34). As noted previously, the qualifications required to become an AEP have changed in recent years.

Respondents also reported having a range of other post-graduate qualifications including bachelor degrees not specific to exercise physiology (11%, n=110), honours degrees (n=7%, n=83) graduate diplomas (20%, n=71), master's degree, professional practice or management research degrees (24%, n=231) and professional doctorates or PhDs (2%, n=17).

Forty (40) respondents reported they were currently undertaking additional studies in a range of qualifications, including 10 indicating they are completing a PhD. See Figure 33 and Appendix Table 11 for detailed breakdown by respondent numbers to different qualifications.

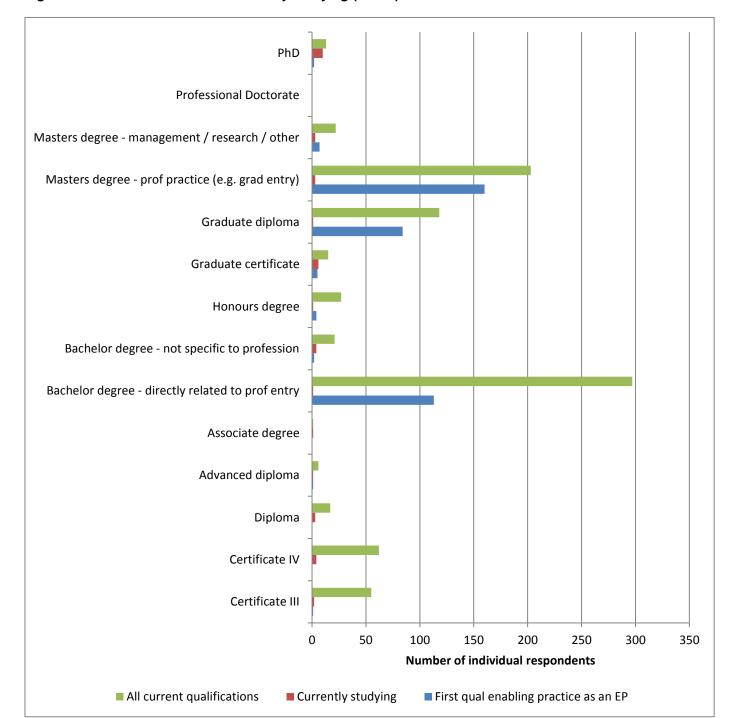


Figure 34: Qualifications held or currently studying (n=475) a

The focus group discussions emphasised the need for formal education and skill development opportunities for developing more advanced skills in specific clinical domains as well as in research and public policy. A participant employed in the tertiary education sector explained that as the number of exercise physiologists who have been practising for a while has grown, universities are getting more enquiries asking questions like 'What can I do next?', 'Where can I go to study next?'. The participant explained that the university she is employed by is looking at options for offering qualifications to respond to this growing interest and need within the profession.

"Studying my PhD has given me access to work at the university."

^a Respondents could select more than one response for 'all current qualifications' and 'currently studying'

"The opportunity to get a duel degree in physio and exercise physiology would be great."

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

Two thirds of respondents (66%, n=249) completed their exercise physiology qualification in 2010 or later (Figure 35) which is consistent with the high proportion of respondents being 35 years of age and under.

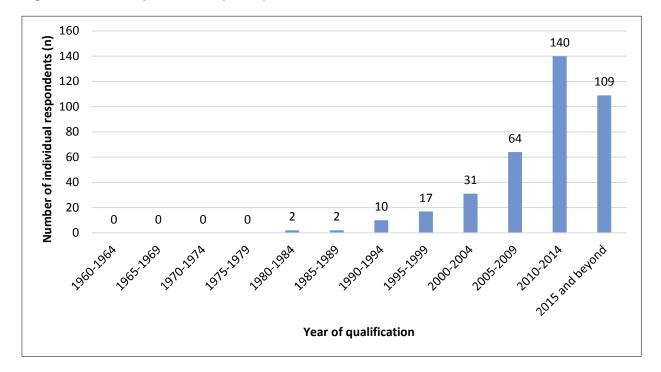


Figure 35: Year of qualification (n=375)

Most respondents qualified to practise as an exercise physiologist in Victoria (73%, n=275), or another Australian state (24%, n=92), predominantly New South Wales (11%, n=42) or Queensland (9%, n=34). The majority trained in a metropolitan area (69%, n=258). Overseas trained exercise physiologists accounted for just 2% (n=9) of respondents (Appendix Table 12).

Continuing professional development

Exercise physiology respondents 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 majority of AHWQ2 respondents were AEPs or pending (99%, n=371) and 99% (n=367) were members of the ESSA. A small number of participants were also members of other associations including Fitness Australia, Sports Medicine Australia, and the Australian Strength and Conditioning Association (Figure 36).

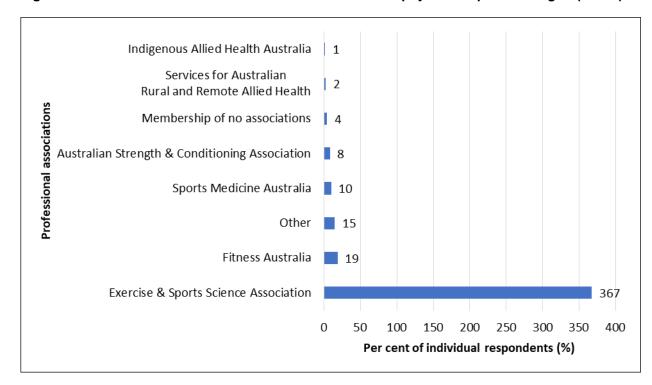


Figure 36: Professional associations and societies exercise physiotherapists belong to (n=375)

Career development and progression

When respondents were asked about their access to training to progress their career as an exercise physiologist, more than half (56%, n=130) agreed that their access was adequate. However, nearly one third (31%, n=73) provided a neutral response to this question and 13% (n=30) indicated disagreement.

A positive response was highest for respondents working in the university / higher education sector, with 12/13 (92%) indicating adequate access to training. This contrasts to those working in other sectors, including the public sector (44%, n=35) and the private sector (59%, n=54).

Respondents emphasised the need for improved access to CPD as well as formal training in specialised clinical skills. Exercise physiologists whose supervisors were from a profession other than exercise physiology said that access to CPD directly relevant to their role was not always adequate due to lack of understanding of their scope of practice, poor understanding of their development needs, and internal development programs that catered to the needs of the department they were employed within (e.g. physiotherapy). Despite this experience in relation to specific exercise physiology development, significant CPD benefits were noted to arise from working in an effective multidisciplinary team.

A number of participants reported that ESSA provides excellent CPD, although some commented that there needs to be a greater focus on clinical skills rather than an over emphasis on business skill development. Some respondents noted that the cost of CPD for maintaining AEP status is a challenge, particularly for professionals in part-time roles, on maternity leave, or working in low paid positions such as AHA roles.

The focus groups provided the opportunity to ask participants about the development opportunities they had been given to develop skills and confidence for working with people from culturally and linguistically diverse backgrounds and with people from an Aboriginal and / or Torres Strait Islander background. Interestingly, most focus group participants indicated they had not been provided with any education on these issues through their pre-entry training. Most, but not all, focus group participants explained that their employers provided effective training on issues relevant to the demographics of their local context. Interestingly, a focus group contributor employed in the university sector explained that this content is in fact covered within pre-entry training, but perhaps without the relevant opportunity to apply the

knowledge, students do not engage with the knowledge to the extent they might once they are in the workforce.

"Professional development is absolutely necessary but expensive and stressful."

"Working as a sole EP among physios means that PD is physio focused."

"There's a lack of professional development opportunities that relate to practice (as opposed to business growth)."

"The issue of providing culturally responsive services isn't really covered at uni but is definitely picked up as professional development in all community health services I've worked in. Aboriginal and Torres Strait Islander issues, LGBTIQ, CALD training. They get external providers to do the training and it's really well done. We also have support within the organisation. There's relevant people in the organisations to talk about it more."

In general, perceptions regarding career development and progression opportunities were not positive. When asked about career development, less than half of the respondents (43%, n=99) agreed they had local career development opportunities and fewer had career development opportunities with their current employer (38%, n=88), and even less (22%, n=50) agreed they had a clear career progression pathway within the profession (Figure 37).

Those in the private sector reported more positive perceptions of career development and progression than those in the public sector. Fifty one per cent (51%, n=47) of private sector employees agreed they had local career opportunities in contrast to 30% (n=24) of those in the public sector and 29% (n=26) agreed they had a clear career progression pathway within the profession compared to 15% (n=12) in the public sector. Although respondent numbers were small, seven of the eight private practice owners agreed they had clear career development opportunities with their current business. This contrasted with less than half the exercise physiologists who worked in private practice as an employee / subcontractor (41%, n=23) or for a large private provider (41%, n=11), and less than a quarter (24%, n=14) in the State public sector, and only 7% in the NFP sector (n=5).

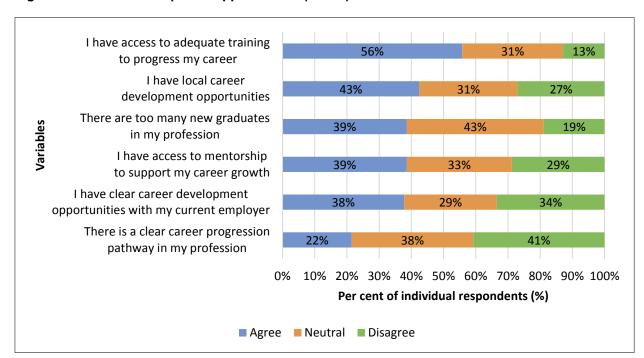


Figure 37: Career development opportunities (n=233)

These findings were strongly supported by the qualitative survey responses and focus groups. When asked about factors that had enhanced their career progression, the identified themes included:

- Personal commitment and investment, hard work and dedication, and an individual's capacity to create their own career opportunities,
- Participation in CPD and formal study in clinical skills, research, business, human resources and project management,
- · Supportive management that explicitly facilitates new opportunities,
- · Good supervision and mentoring,
- · Working with others in a supportive multidisciplinary team,
- Actively seeking out diverse experiences, including working in regional areas, interstate, and overseas; across public and private; and in research positions,
- · Working within an organisation that understands and respects the role of exercise physiology, and
- Increasing recognition of exercise physiology in the community and amongst health professionals.

"I've been helped by luck...hard work...being willing to work in multiple roles initially that built a diverse skill set (especially in research) that has increased my scope of practice. Currently I have a manager who is very supportive and willing to advocate for the role of EPs within the health service which has grown not only the number of EFT allocated to EPs but also provided progression within my pay grade that would not have occurred normally."

"The increasing numbers of exercise physiologist is slowly increasing opportunities."

"I currently work as an EP privately as well as working part-time as a research assistant. I feel the combination of these roles has given me more options in terms of my career progression in the future."

"I have a manager who is very supportive and willing to advocate for the role of EPs in the health service. This has grown not only the number of EFT allocated to EPs but also provided progression within my pay grade that would not have occurred normally."

When asked about the barriers to career progression, responses included:

- · Lack of a career structure generally and senior positions generally,
- Recruitment of exercise physiologists into AHA roles at a lower salary than recruitment into exercise physiology position,
- Poor awareness of the exercise physiology role and scope of practice,
- · Lack of recognition of exercise physiologists as autonomous professionals,
- Lack of designated exercise physiology departments / employment of exercise physiologists within physiotherapy departments,
- Lack of secure, permanent, full-time exercise physiology positions and the associated low workforce turn over, and
- Advertising of senior positions across disciplines (e.g. physiotherapy, occupational therapy, exercise physiology).

Exercise physiologists working in sole positions noted the lack of opportunities for career progression, despite developing high level skills and fulfilling management duties in addition to a clinical role.

"Living in a regional town where senior staff are unlikely to move on means opportunities to apply for senior roles are limited."

"The reason I left my first hospital job was that there was no room for progression. All the funding went to physiotherapy positions because we were managed by physiotherapists. They said, 'We know you're working at a grade 2 level, but it's an opportunity to upskill.' Which for 8 years in a row gets a little hard to hear."

"In public health there are limited opportunities for EPs to progress to grade 3, and even fewer to progress beyond grade 3...The EP teams are generally small, in part due to the established workforce of physiotherapy in the same space, and at times I believe that the opportunity for progression has been limited by a poor understanding of managers as to the scope of practice for exercise physiologists, and a perceived difference in the level of capability compared to other professions."

"There are too many EPs out there looking for work, so the employer doesn't have to offer any progression as they can employ new EPs easily."

Clinician knowledge and skills

A clear majority of exercise physiology respondents (90%, n=205) indicated they have the skills necessary to perform their current job. Only 2% (n=4) indicated this was not the case and 8% (n=19) gave a neutral response. Similarly, a high proportion of respondents (83%, n=190) indicated they have the tools needed to perform their role safely. Although a positive finding, it does not diminish the relevance of the fact that 17% (n=38) indicated they do not have the tools to perform their job safely or gave a neutral response to this question (Figure 38).

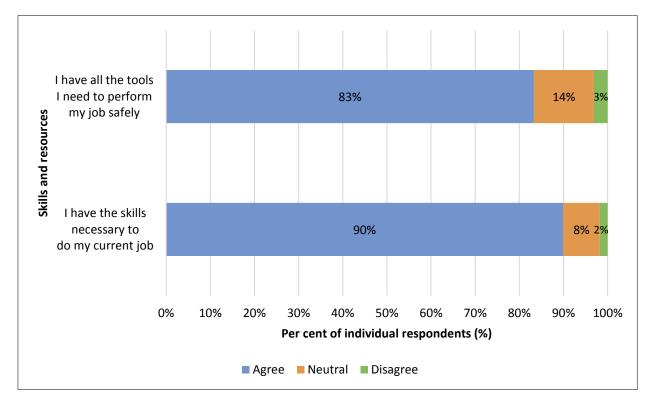


Figure 38: Clinician skills and resources (n=228)

Skill gaps

Seventy (70) organisational respondents answered the questions related to skill gaps for exercise physiologists. Of these respondents 54% (n=38) reported a gap in management, business and other professional skills, while 46% (n=28) reported a gap in clinical skills.

Gaps in clinical skills

The most frequent areas of clinical skill gaps were musculoskeletal (50%, n=13) and neurological and neuromuscular conditions (36%, n=9). It is noteworthy that these two areas were both in the top three areas of practice of the respondent cohort. Skill gaps relevant to the broader practice of clinical service delivery included clinical communication (43%, n=11) and motivational interviewing and counselling (39%, n=10) (Figure 39).

It should be noted that reporting of skill gaps will be highly dependent on the specific areas of service delivery of an individual organisation and may not be reflective of profession-wide gaps.

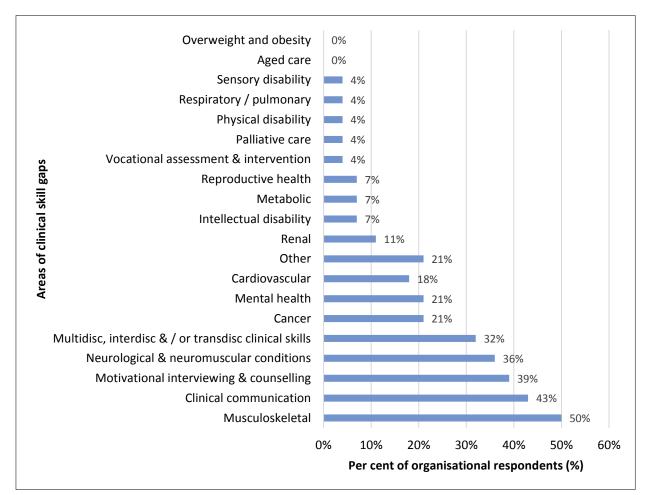


Figure 38: Gaps in clinical skills identified by organisational respondents (n=28)

Gaps in management, business or other professional skills

When asked about skill gaps in management, business and professional skills, the most frequently reported gaps included business skills and entrepreneurship (68%, n=24), communication and marketing (53%, n=18), and management and administration (53%, n=17). These areas of skill gap were reported more frequently than skill gaps in areas such as case management, medico-legal issues, quality improvement and workplace resilience (Figure 40).

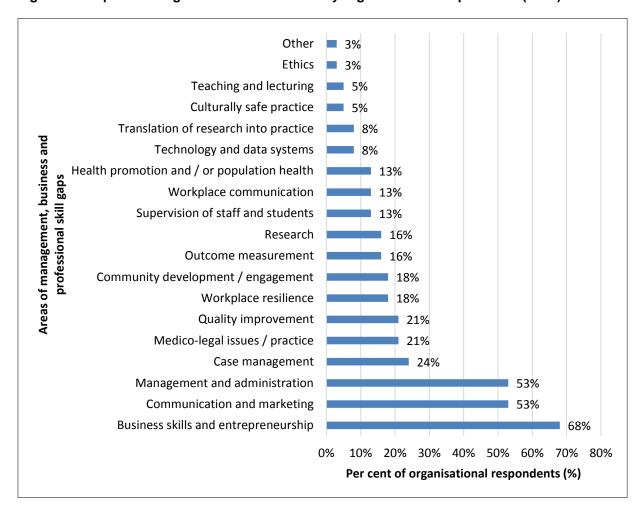


Figure 40: Gaps in management skills identified by organisational respondents (n=38)

Support contexts to enhance capability

Supervision and support

The exercise physiologists who responded to the AHWQ2 and contributed to the focus groups emphasised the importance of good quality supervision and support. When asked an open-ended question about the contributors to their career progression opportunities, supervision, mentoring, supportive management, and working alongside others in a supportive multidisciplinary team were identified by many respondents as being important variables.

Despite these qualitative findings, the AHWQ2 showed that nearly one third (31%, n=77) of exercise physiology respondents did not have an administrative supervisor and just over one third did not have a clinical supervisor (36%, n=88) (Figure 41).

Clinical supervision

The AHWQ2 showed that 32% (n=79) of exercise physiologists have an exercise physiologist as their clinical supervisor and 26% (n=65) have another AH professional clinically supervising them (Figure 41). Professionals working in the university / higher education sector were the most likely to have an exercise physiologist as a clinical supervisor (57%, n=8), followed by those working in private practice as an employee or contractor (41%, n=24). Those working in private practice as the business owner were least likely to have an exercise physiologist as a clinical supervisor (22%, n=2).

Administrative supervision

When asked about the professional background of their administrative supervisor, 34% (n=84) were supervised by an individual from another AH profession, 16% (n=39) received supervision from professionals from a non-clinical background, and only 14% received supervision from an exercise physiologist. Thirty one per cent (31%, n=77) reported not having an administrative supervisor (Figure 41).

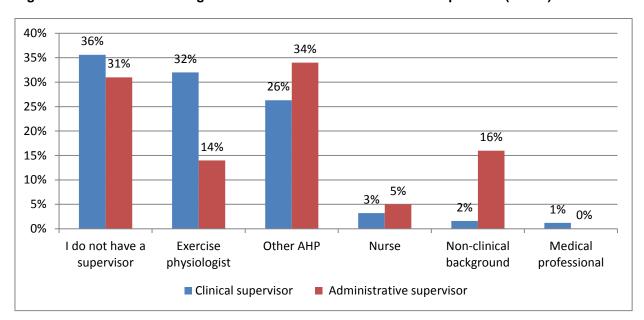


Figure 41: Professional background of clinical and administrative supervisor (n=247)

The individual experiences with this supervision varied, but the majority of comments demonstrated unhappiness with their level of supervision.

"I've had access to high quality, supportive mentorship and supervision."

"The private practice place I worked at...in 3 years I worked there I didn't get any supervision. I could have been telling people the wrong thing and no-one would know."

"I never got any supervision unless I'd go to a colleague or if I chose to talk through a case conference with someone...I was lucky one of my masters lecturers took me on as a mentor relationship and I could go to her at any time. I never, ever had anything direct in my work until the last two years because my company said let's get you a supervisor. But it's not around the clinical stuff."

"It's difficult that we're often overseen by other health professionals. We're not often overseen by EPs."

Figure 42 provides further information on the support experienced by exercise physiology respondents. A greater proportion of exercise physiologists reported positively on the support they receive than those who reported a neutral or negative response. For example, 66% (n=148) agreed they had access to assistance if they are uncertain about their work, 64% (n=139) agreed they had management support from a member of their own team, and 67% (n=152) agreed they had access to peer support from members of the exercise physiology profession. Conversely, these results also reveal that a third of respondents reported neutral or negative experiences in relation to these features of their work.

Those most likely to have access to peer support from other exercise physiologists were those in inner regional areas (76%, n=35) and inner metropolitan areas (73%, n=91). Those least likely to have this support were in out-regional areas (42%, n=5), rural areas (45%, n=5) and outer-metropolitan areas (52%, n=14). A similar pattern was evident in the location of those who were least likely to indicate having access to help when they were uncertain about their work, with those in outer metropolitan areas

(37%, n=10), outer-regional areas (42%, n=5), and rural areas 55%, n=6) indicating the lowest level of agreement with this statement.

A little over one quarter of individual respondents (28%, n=63) said they were professionally isolated. Although there were very few respondents from remote locations, all of these individuals reported being professionally isolated. Other locations from which professionals reported a higher than average level of isolation included outer regional areas (42%, n=5), inner regional areas (41%, n=19), and rural areas (data withheld n=<5).

The implications of not having a supervisor were a significant issue for some respondents. Focus group participants explained that where no formal supervision is in place, individuals need to seek this out for themselves. Discussion in one focus group emphasised that, given so many exercise physiologists work alone or in very small teams, the professional support of individuals and the maintenance of standards within the profession would be well served through implementation of an external supervision framework governed by ESSA, particularly for early career professionals. Although some participants were aware of the mentor program offered by ESSA, none of the focus group participants had accessed it.

Additional information about respondent experiences of professional support and development, analysed by sector, is provided in Appendix Table 13.

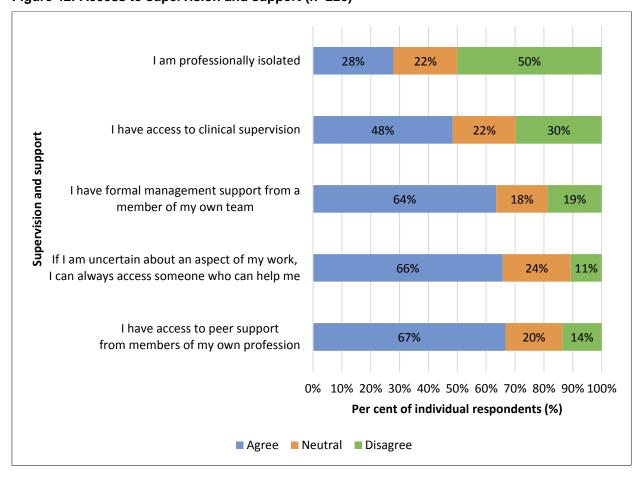


Figure 42: Access to supervision and support (n=228)

"I think in Victoria we have a pretty good network between EPs who share openly, rather than it being a competitive workforce."

"Working as a sole EP among physios is very limiting."

"My opportunities are limited by being the sole EP in a multidisciplinary team, which has never employed EPs before – i.e. my employer and team members are unaware of my scope of practice."

"I have had to work entirely on my own to forge ahead without peer support."

Team structure

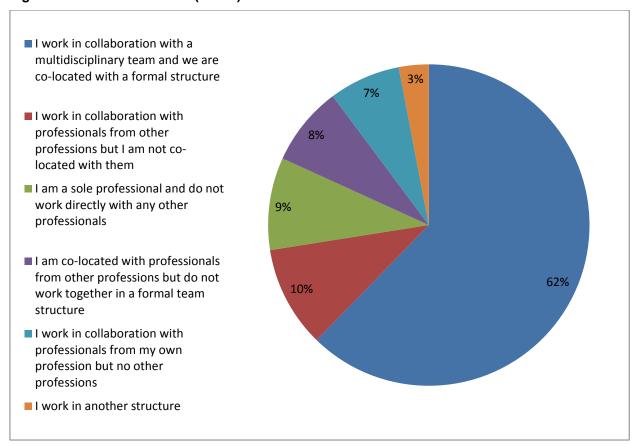
Most exercise physiologists who responded to the AHWQ2 reported working in a co-located multidisciplinary team (62%, n=147) and a further 10% (n=24) indicated they worked in collaboration with other professionals even though they were not co-located. Nearly a quarter of respondents (24%, n=58) reported arrangements with lesser degrees of team structure. This group included 9% (n=22) who were sole practitioners and did not work directly with anyone, 8% (n=19) who were co-located with professionals from other professions but without a formal team structure, and 7% (n=17) who were working collaboratively with other exercise physiologists but no other professions (Figure 43).

As reported previously, the opportunity to work in a supportive multidisciplinary team was identified as an important contributor to an individual's career progression. Although a proportion of respondents had a positive experience in this regard, others were affected by challenges arising from working under the management of a profession that was not their own and with professionals who did not understand nor enable them to work to their full scope of their practice. In turn, this was perceived to limit their opportunities to develop professionally and advance into more senior roles.

"I work within a multidisciplinary team that supports the EP profession."

"Unfortunately, the expertise of exercise physiologists and their potential to positively contribute to multidisciplinary allied health team is simply not recognised and, in most cases, not taken into consideration."

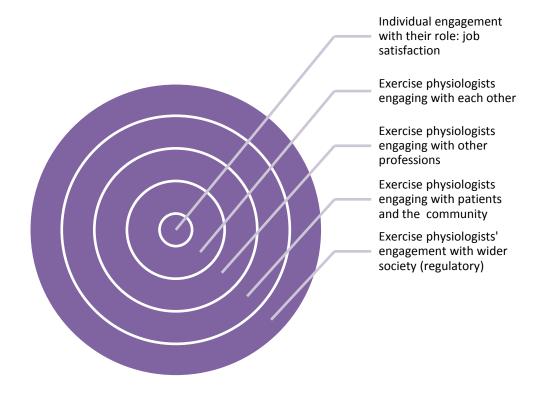
Figure 43: Practice structure (n=236)



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 44).

Figure 44: Model of engagement



Key findings

- Most participants expressed being extremely satisfied (23%, n=53) or somewhat satisfied (59%, n=139) with their careers.
- Examples of factors that contributed to respondents' work satisfaction included the opportunity to
 make a positive difference to the health and quality of life of their clients, working across diverse
 clinical domains, and contributing to the development of a new and growing workforce.
- Opportunities for career advancement was rated amongst the top three (60%, n=137) from a selection of variables that influenced respondents' employment choices, it had the lowest proportion of respondents who reported being very satisfied with this factor (19%, n=44).
- ESSA was identified as an important enabler of intra-professional engagement, including CPD and conferences, mentoring, advocacy for the profession, and opportunities to contribute to the profession.
- Despite some positive feedback about the work of ESSA, concerns were expressed about the high
 cost of accreditation, membership and CPD, as well as inadequate promotion of and advocacy for the
 profession.
- Challenges to intra-professional engagement included employment as sole practitioners, practising across multiple locations, lack of formal supervision and the cost of CPD.
- In relation to inter-professional relationships, examples of key challenges included lack of professional
 understanding of the scope of practice and evidence-base of the exercise physiology profession; lack
 of definition and understanding of the differences in scope of practice between exercise physiologists,
 physiotherapists, and personal trainers; and lack of appreciation by other health professionals that
 exercise physiologists are highly trained, autonomous professionals.
- Community awareness of the role of the exercise physiology profession was reported to be very limited and not assisted by the poor awareness of other health professionals; in particular, GPs.

Individual role engagement

Over half (59%, n=139) of all exercise physiology respondents reported being somewhat satisfied with their current work situation. A further 23% (n=53) indicated being extremely satisfied (Figure 45). Nearly one in five (19%, n=43) were ambivalent regarding their satisfaction or explicitly stated being either somewhat or extremely dissatisfied.

Additional information about respondent job satisfaction, analysed by sector, is provided in Appendix Table 14.

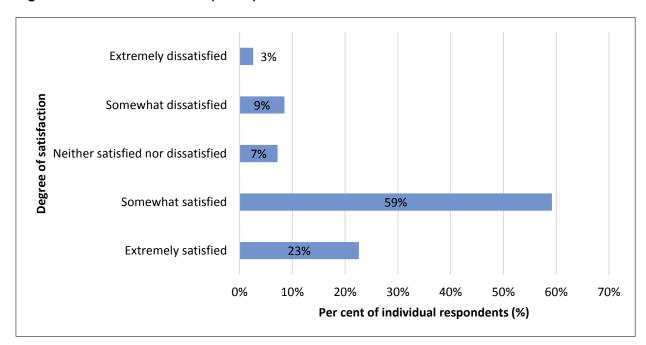


Figure 45: Overall satisfaction (n=235)

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

- Work-life balance (91%, n=208)
- CPD opportunities and support (62%, n=142)
- Career advancement opportunities (60%, n=137) (Figure 46).

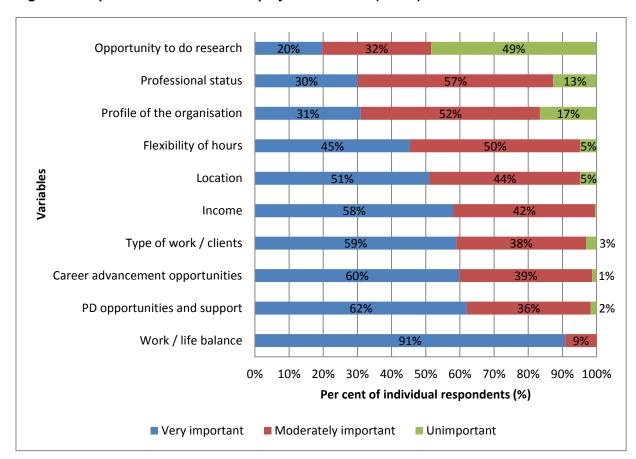


Figure 46: Importance of factors in employment choices (n=229)

Despite these aspirations, the proportion of those who indicated they are currently very satisfied with these three features was markedly lower than the proportion that nominated the variables as having high a high level of importance:

- Work-life balance (43%, n=99)
- CPD opportunities and support (34%, n=77)
- Career advancement opportunities (19%, n=44) (Figure 47).

The two variables that the highest proportion of respondents reported they were very satisfied with were location (54%, n=124) and flexibility of hours (52%, n=119).

Despite career advancement opportunities being rated third highest with respect to its influence on employment choice, it had the highest proportion of respondents (37%, n=85) who reported being dissatisfied with this factor in their current working life (Figure 47).

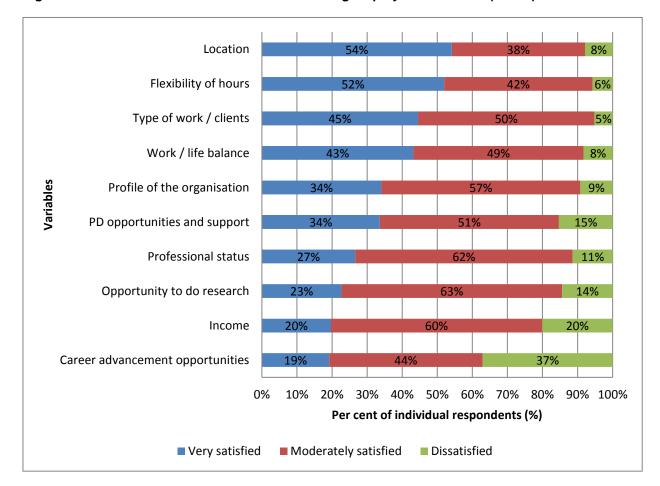


Figure 47 Current satisfaction with factors affecting employment choices (n=229)

"Being able to work in both private practice and in public health has allowed me to use a variety of skills."

"All the jobs I've had, I have worked a standard 8-hour shift on a salary. I come at a certain time, finish at a certain time, I know what my work week looks like. That's a positive."

"For me work-life balance is down a bit – I have to work a couple of different jobs. But I'm happy with the type of work I do. It always depends on where the EP sits within the organisation."

"There's no career progression due to a lack of positions. There's a very flat structure with an overabundance of grade 1s and 2s and very few grade 3s. So, there's nowhere to promote to."

"Employment of EPs in physiotherapy departments means there's no opportunity to become head of discipline and progress through a management pathway."

The issue of career satisfaction was explored in more detail in the focus groups. The variables that individual participants identified as contributing to their satisfaction included:

- Making a positive difference to the health and quality of life of clients.
- Having the chance to work across diverse clinical domains and service sectors.
- · Valuing of exercise physiology in the workplace.
- Educating and developing the future exercise physiology workforce.
- Contributing to the development of a new and growing workforce.
- Recognising small signs of improvement regarding a career pathway as an exercise physiologist.

- Making the most of accessing diverse experiences from part-time roles and contract roles.
- · Working to a predictable schedule with a reliable salary.

Factors that detracted from career satisfaction included:

- Poor opportunities for secure employment commensurate with education levels.
- Limited opportunities for employment in the public sector compared to other AH professions.
- · Lack of full-time employment opportunities.
- Lack of permanent employment opportunities.
- Compromised work-life balance arising from a need to work in more than one job.
- Lack of opportunities to establish a long-term career as an exercise physiologist.
- Inadequate clinical supervision.
- Pressure to have clients booked in and turning up in the context of a private practice.
- Pay that is not commensurate with qualifications or duties.

"Allied health at my organisation has had to endure over 5 years of budget stress, (including redundancies and other staff reduction strategies). This has created an incredibly lean workforce. It has taken its toll on work satisfaction, work life balance, career advancement opportunities, opportunities to explore research and advanced scope trials. I am concerned it may lead to a number of allied health professionals leaving their discipline completely."

"I'm pretty satisfied with my career. If we just look at the EP hours I do, I'm definitely enjoying it. The struggles are the lack of governance and lack of supervision because we don't have a proper service established. I've been the one to build the service and build programs solely. I'm still only treated as a grade 1 EP, where if it was any other profession it might be a more senior role."

Intra-professional engagement

When asked about membership of professional associations, nearly every respondent (99%, n=370) indicated they were a member of ESSA. Participants reflected the importance of ESSA's role for the profession. Despite communicating the critical role of the association, opinions regarding ESSA's effectiveness were mixed.

Some respondents were very positive. Their feedback highlighted the value provide by ESSA through:

- · Delivery of a wide range of CDP
- · Provision of a professional mentoring program
- · Promotion of the exercise physiology profession
- Achieving provider recognition for funding options such as Medicare, NDIS, WorkCover, TAC, DVA, and private health insurance
- Providing opportunities for members to actively participate in advancing the profession.

"ESSA provides great professional development which has aided my knowledge and skill set."

"I value the opportunity I had to work on the committee with ESSA Victoria in its infancy when relationships with peak bodies were established and provider recognition became a reality."

In contrast to this positive feedback, others expressed the following concerns:

- The high cost of accreditation for little benefit, and lack of equivalence with fees for registration of other professions through the AHPRA
- The high cost of membership, particularly for new graduates and those working part-time

- · The high cost of CPD
- Inadequate CPD in specific domains, e.g. business skills and occupational rehabilitation
- Inadequate promotion of and advocacy for exercise physiology to other professions, the public, government, and other stakeholders.

"The cost of professional membership makes accessibility to new graduates difficult."

"ESSA registration and membership fees are too high compared to other allied health professions, i.e. AHPRA – why can't the EP system work similar to this, you pay a small fee to be registered as there is substantial cost associated with ongoing PD to stay accredited / registered."

"I don't like it that there isn't part-time membership fees and the fact you still need to do the full amount of PD for the year if you are only working part-time i.e. returning to work after children. You don't have the capacity to earn as much, why should you be paying the same as full-time employees?"

"AEPs have very expensive accreditation with little benefit associated."

At an individual level, challenges to intra-professional engagement were reported to include:

- · Employment in roles as sole exercise physiologists
- The need to practice across multiple physical locations with little opportunity to connect with other exercise physiologists
- · Lack of formal supervision arrangements for many exercise physiologists
- The cost of CPD.

As noted previously, professional isolation was reported as an issue for 28% (n=63) of respondents. For some respondents, this appeared to be experienced through the direct day-to-day isolation of not working alongside other exercise physiologists. Contributing variables for others included the lack of awareness and recognition of the role of exercise physiology and the sense that exercise physiologists are not afforded equal status with other AH professionals.

Inter-professional engagement

A number of exercise physiologists reinforced the critical importance of effective multidisciplinary practice to deliver the best possible services to individuals and the community. Responses reflected an aspiration to contribute to and deliver an integrated approach to health care delivery. A proportion of respondents explained that their positive experiences working within multidisciplinary teams were significant in supporting their development as professionals and advancing their career opportunities.

"It's made a difference to work with a supportive physiotherapy department that allows EPs to showcase our skill set."

"A supportive multi-disciplinary team within a hospital setting has given me an array of knowledge regarding healthcare as a whole sector. I believe the experience gained in this environment is invaluable and will benefit my career progression."

Despite evidence of positive experiences of inter-professional practice amongst the cohort, when exercise physiologists were asked about the single most important issue they would like to see addressed by, or for, their profession the most frequent response related to the poor knowledge of other health professionals regarding the role, scope of practice, and evidence-base of the profession, which impacts on referral patterns as well as day-to-day inter-professional practice. Although respondents felt that all health professionals needed better understanding of the exercise physiology role, GPs were explicitly identified by many respondents as requiring particular focus.

"I'm still getting referrals from GPs for 'exercise physiotherapy'. They still don't get what we do. Every time I meet with them I spend the entire time clarifying the profession."

"There needs to be a greater understanding of the exercise physiologist profession, the capabilities and benefits that can be achieved through EP services, not just in the general public but other allied health professionals, GPs and specialists"

The exercise physiology respondents identified a number of other concerns regarding their relationships with other professionals, including:

- A lack of appreciation by other health professionals that exercise physiologists are highly trained, autonomous professionals, whose work is not dependent on the delegation of other AH, medical or nursing professionals.
- The employment of exercise physiologists into AHA roles, which reinforces perceptions that exercise physiology is a workforce to which other professions delegate.
- The lack of definition and understanding of the differences in scope of practice between exercise physiologists, physiotherapists and personal trainers.
- The frequent employment of exercise physiologists within physiotherapy departments. Respondents
 felt this compromises opportunities to define the scope of practice of the exercise physiology
 profession within an organisation and as a profession generally, and also limits career advancement
 opportunities.
- The observation that many tasks exercise physiologists are trained to perform are carried out by physiotherapists who may be less well equipped.
- The observation and concern that many personal trainers work with individuals with chronic disease and other risk factors, which has potential risks for clients

"Too many personal trainers are delivering (and advertising their ability to deliver) independently directed and developed services to high-risk clients for which they are not trained, and are not skilled to work with, which is outside their scope of practice. This creates significant risk to public health."

"All allied health professions should have an equal status and opportunities, but it seems that some are more 'equal' than the others."

"There is a lack of recognition of EP as fully qualified allied health professions with the skills for autonomous practice."

"I think what we do in allied health is fantastic across the board, but until we are all working on equal playing fields with equal recognition, structure, career growth, clinical support and community identity I don't feel that we have achieved the highest level of professionalism we should be aiming for in Australia."

As previously mentioned, another issue affecting inter-professional engagement related to parity of pay for equivalent skill levels and work. Examples of this included the need for:

- Exercise physiology to be grouped with other equivalent AH services within rebate schemes, e.g.
 recognition by private health insurers of exercise physiology as an AH profession, not a natural or
 alternative therapy.
- Parity of rebates for provision of equivalent AH services provided by different professions funded under Medicare and other rebated schemes.
- Parity of pay for individuals working in sole positions whose duties include both clinical and service governance roles.

"We get poor pay for our work. A lot of EPs start out in low paid roles, not equal in standing to the years of training conducted."

Engagement with the community and society

When asked about their connection with the community, exercise physiology respondents again emphasised the challenges arising from the general public's poor awareness of the role of exercise physiology in maintaining and improving individual and community health and wellbeing.

Many participants identified the need to improve community understanding of the benefits of supervised exercise, specifically prescribed to meet an individual's health status, needs and goals. Additionally, the role of exercise physiologists in supporting the general public to establish exercise as a life-long habit to maintain good health was emphasised.

Causes of poor community awareness of the profession were reported to include poor awareness on the part of referring professionals (particularly GPs) and challenges delivering comprehensive, evidence-based services in the context of current funding models and models of care.

A number of respondents explained that the profession's name causes confusion for the community. Like other professionals, clients were also noted to call exercise physiologists 'exercise physiotherapists' or even just 'physiotherapists'. This was reported to occur even after a client had accessed exercise physiology services for a period of time. One respondent suggested that the profession needs to consider changing its name from one that defines a single subject studied by pre-entry students to something that more clearly communicates the functional contribution of the role to individuals and the community.

"There is a general lack of knowledge and awareness in the general public about what exercise physiologists do, the importance of their services, and the difference between personal trainers and exercise physiologists. This is particularly an issue in regional areas."

"There needs to be increased knowledge of the key skills of the exercise physiology profession being provided to the wider medical community, as exercise is proven to be a crucial part in the prevention, treatment and ongoing management of most chronic and complex conditions."

Conclusion

Exercise physiology is an emerging profession, with a young and rapidly growing workforce. The private sector is the profession's largest employment sector although the profession recognises significant opportunities to make a far greater contribution to the public health system.

Lack of professional and community awareness of the exercise physiology role, scope of practice, and evidence-base were identified as primary limiting factors for the profession. Many consequences were attributed to this, including: funding models that restrict the profession's capacity to contribute to individual and community health to its full potential; inability to work to the profession's full scope of practice; compromised referral patterns; inadequate job opportunities; and poor job security.

Whilst funding for exercise physiology services through government rebates and private health insurance have improved in recent years, the need to achieve equity with other AH professions was reinforced.

A high proportion of exercise physiologists work within formal multidisciplinary teams, however, many are the sole exercise physiologist within their work context. For some, the team environment contributed positively to their work experience and career development. For others, the consequences of poor awareness of their role are reinforced in this context and limitations to career progression are experienced.

Respondents highlighted the significant community need for exercise physiology services. Whilst the need to expand the profession's current role in acute care and chronic disease management was noted, the significant missed opportunities to improve and maintain community health and wellbeing through prevention and early intervention were a source of considerable concern to the profession. The lack of exercise physiologists working with children was also a concern.

In the context of inadequate job opportunities and poor job security, employment in AHA roles was reported as a common career entry point for many exercise physiologists. This pattern was said to contribute to lack of recognition of exercise physiologists as professionals who hold qualifications, skills, and capacity for autonomous practice equivalent to other AH professionals. Beyond the challenges of initial entry to exercise physiology employment, subsequent lack of career progression opportunities was raised by a high proportion of research participants.

To ensure more effective use of the available workforce and reduce clinical risk, participants highlighted the need to better define the differences in scope of practice between exercise physiologists, physiotherapists, and personal trainers.

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Victorian Public Service Commission (2016). Public health services (hospital) workforce dataset. Provided by Department of Health and Human Services

Appendix

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

Responses and respondents

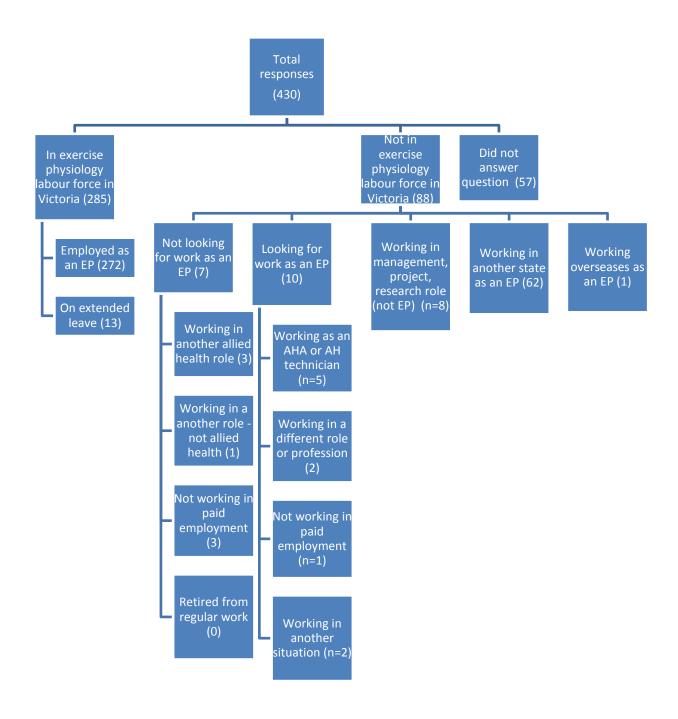
The AHWQ2 survey was completed at both the organisational and individual practitioner level. The respondents to the organisational / managerial level questions were presented with 12 questions, plus four questions that were conditional on answers to previous questions; the individual clinicians were 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 430 exercise physiologists completed at least one question on the survey and submitted their survey. The range of respondents to an individual question ranged from 88 to 1,879. 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 156 individual respondents (36%) provided their email address and agreed to be followed up for further research.

Most respondents (76%) were employed in the exercise physiology workforce in Victoria at the time of completing the survey. Only 10 of the 88 respondents who indicated they were not currently employed as an exercise physiologist in Victoria reported they were actively seeking exercise physiology work in Victoria.

Figure 1: Current employment status⁶



⁶ All data in Figure 1 and Tables 1 – 14 comes from the AHWQ2 survey

Table 1: Employment context of respondents not currently working as an exercise physiologist in Victoria^a (n=88)

Reason for not working	%	Count
Working in another Australian state as an exercise physiologist	70	62
Looking for work as an exercise physiologist	11	10
Working in a management / project / research role related to allied health but not specifically related to my discipline	9	8
Not looking for work as an exercise physiologist	8	7
Total	100	88

^a Includes respondents who are not working or have never worked as an exercise physiologist in Victoria.

Table 2: Employment context of those looking for work as an exercise physiologist (n=10)

Reason for not working	%	Count
Working in an allied health assistant or allied health technician role	50	5
Working in a different role or profession	20	2
Not working in paid employment	10	1
Working in another situation	20	2
Total	100	10

Table 3: Reasons for not currently working as an exercise physiologist (n=10)

Reason for not working	%	Count
No jobs available in my local area	20	2
No jobs available that interest me	30	3
No jobs I that I feel qualified to do	0	0
No jobs available at the appropriate level / pay rate	0	0
I don't work in an exercise physiology role, but I identify with my profession	20	2
I don't work in an exercise physiology role and I no longer identify with my profession	0	0
Illness	0	0
Family reasons	0	0
Maternity leave	0	0
Other	30	3
Total	100	10

Table 4: Primary area of practice and all areas of practice AHWQ2a (n=260)

Areas of focus	Primary area	of focus	All areas of f	ocus
	%	Count	%	Count
Musculoskeletal	39	102	88	229
Metabolic	13	34	74	192
Other	8	21	14	36
Neurological and neuromuscular diseases and conditions	7	19	64	167
Overweight and obesity	7	17	75	195
Aged Care	6	16	38	100
Cardiovascular	6	15	73	189
Cancer	5	12	53	138
Mental Health	3	8	50	129
Vocational assessment and intervention (i.e. functional assessment, task analysis)	3	8	13	34
Motivational interviewing and counselling	2	4	47	122
Respiratory / pulmonary	1	3	50	130
Physical disability	<1	1	37	97
Intellectual disability	0	0	16	42
Renal	0	0	13	34
Reproductive health	0	0	8	21
Sensory disability	0	0	8	20
Palliative care	0	0	2	4

^a Respondents could select more than one response to signify 'all areas of practice'.

Table 5: Exercise physiology scope of practice (n=238)

Practice	%	Count
Participants who delegate to AHAs	37	88
Participants who use telehealth (including video conferencing for supervision)	15	36

Table 6: Number of jobs held as an exercise physiologist across the career path (n=296)

Number of jobs	%	Count
One / this is my first and only job as an exercise physiologist	29	87
2	24	70
3	16	46
4	14	41
5	8	23
6	9	27
>10	1	2
Total	100	296

Table 7: Changes in location – first position, position prior to current position, current main position (n=243 - 283)

Location	First position		Position prior to current position		Current main position	
	%	Count	%	Count	%	Count
Victoria - Metropolitan	60	148	61	157	64	182
Victoria - Regional	17	42	20	52	22	63
Victoria - Rural / remote	6	14	6	16	6	16
Australia - Metropolitan	7	17	5	14	4	10
Australia - Regional	6	14	5	12	3	8
Australia - Rural / remote	2	4	2	6	1	3
Overseas	2	4	1	3	<1	1
Total	100	243	100	260	100	283

Table 8: Changes in role – first position, position prior to current position, current main position, current second position (n=232-280)

Location	First positi	First position		Position prior to current position		Current main position	
	%	Count	%	Count	%	Count	
Clinician / direct client services	84	197	78	198	79	224	
Manager	3	6	4	11	9	24	
Teacher / educator	3	7	4	11	5	14	
Researcher	1	3	3	7	2	5	
Project officer	2	4	3	8	1	3	
Other	7	15	8	20	4	10	
Total	100	232	100	255	100	280	

Table 9: Changes in setting – first position, position prior to current position, and current main position (n=230-281)

Sector	First position		Position prior to current position		Current main position	
	%	Count	%	Count	%	Count
Administrative centre or office	4	10	7	17	8	23
Client's workplace	4	10	6	15	4	12
Community locations	5	11	5	12	1	4
Hospital (inpatient or outpatient)	27	62	27	69	28	78
Private or community clinic or medical centre	41	94	39	102	44	123
Residential facility	5	12	1	2	3	8
Schools, preschools, or childcare centres	<1	1	0	0	<1	1
Telehealth / online	0	0	0	0	0	0
Tertiary education facility / research institute	6	14	7	18	6	18
Other	7	16	8	19	5	14
Total	100	230	100	254	100	281

Table 10: Changes in sector – first position, position prior to current position, current main position, current second position (n=233-281)

Sector	First position		Position prior to current position		Current main position	
	%	Count	%	Count	%	Count
State Public Sector	18	41	17	44	24	66
Commonwealth Public Sector	6	15	6	15	11	32
Local Government / Council	4	10	3	7	1	4
Private practice (owner or employee)	44	103	47	120	38	108
Large private provider	12	28	9	23	10	28
NFP	4	9	6	14	6	17
University / higher education / research	7	16	7	17	6	16
Other	5	11	5	13	4	10
Total	100	233	100	253	100	281

Table 11: Qualifications held or currently studying (n=475)

Qualification	Current qualifications	Currently studying	First qualification enabling practice as an exercise physiologist (n=475)
Certificate III	55	2	1
Certificate IV	62	4	0
Diploma	17	3	0
Advanced diploma	6	1	1
Associate degree	1	1	0
Bachelor degree - directly related to prof entry	297	1	113
Bachelor degree - not specific to profession	21	4	2
Honours degree	27	1	4
Graduate certificate	15	6	5
Graduate diploma	118	1	84
Master's degree - prof practice (e.g. grad entry)	203	3	160
Master's degree - management / research / other	22	3	7
Professional Doctorate	0	0	0
PhD	13	10	2

Table 12: Location where gained their first qualification as an exercise physiologist (n=376)

Country	%	Count
Victoria	73	275
New South Wales	11	42
Queensland	9	34
Western Australia	3	11
South Australia	<1	2
Australian Capital Territory	<1	2
Tasmania	<1	1
Northern Territory	0	0
New Zealand	1	3
United Kingdom	0	0
Canada	0	0
India	0	0
Ireland	0	0
United States of America	0	0
Other overseas country	2	6
Total	100	376

Table 13: 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 % of the respondents this represents.

If there were 5 or fewer respondents in any category data is not included to maintain anonymity (e.g. Other, Aboriginal Community Controlled Health Service, Local Government / Council, or individual statements with too few responses)

	State public sector (n=58)	Private practice (employee /subcon) (n=56)	NFP (n=15)	Uni / higher education (n=13)	Large private provider (n=27)	Private practice (owner) (n=7)	C'wlth public sector (n=19)
I have access to clinical superv'n	44% (n=25/57)	50% (n=27/54)	43% (n=6/14)	67% (n=8/12)	54% (n=14/26)	Data withheld (n=<5)	74% (n=14/19)
If I am uncertain about an aspect of my work, I can always access someone who can help me	74% (n=42/57)	68% (n=38/56)	60% (n=9/15)	83% (n=10/12)	56% (n=15/27)	71% (n=5/7)	58% (n=11/19)
I am profinally isolated	26% (n=15/58)	36% (n=20/55)	27% (n=4/15)	8% (n=1/13)	26% (n=7/27)	Data withheld (n=<5)	16% (n=3/19)
I have formal m'ment support from a member of my own team	74% (n=43/58)	72% (n=39/54)	60% (n=9/15)	69% (n=9/13)	13% (n=18/27)	Data withheld (n=<5)	74% (n=14/19)
I have access to peer support from members of my own prof n	71% (n=41/58)	59% (n=33/56)	53% (n=8/15)	85% (n=11/13)	59% (n=16/27)	71% (n=5/7)	68% (n=13/19)
My grade and / or salary is approp for the work I do	48% (n=28/58)	29% (n=16/55)	27% (n=4/15)	77% (n=10/13)	44% (n=12/27)	Data withheld (n=<5)	37% (n=7/19)
I have the necessary skills to do my current job	91% (n=52/57)	96% (n=54/56)	80% (n=12/15)	92% (n=12/13)	89% (n=24/27)	88% (n=7/8)	79% (n=15/19)
I have all the tools I need to perform my job safely	86% (n=49/57)	79% (n=44/56)	67% (n=10/15)	100% (n=13/13)	93% (n=25/27)	88% (n=7/8)	68% (n=13/19)

Table 14: Overall job satisfaction by sector

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 % of the respondents this represents.

If there were 5 or fewer respondents in any category data is not included to maintain anonymity (e.g. Other, Aboriginal Community Controlled Health Service, Local Government / Council, or individual statements with too few responses)

	State public sector (n=58)	Private practice (employee / subcon) (n=57)	NFP (n=15)	Uni / higher education (n=13)	Large private provider (n=28)	Private practice (owner) (n=8)	C'wealth public sector (n=19)
Extremely satisfied	14% (n=8)	21% (n=12)	33% (n=5)	46% (n=6)	32% (n=9)	Data withheld (n=<5)	Data withheld (n=<5)
Somewhat satisfied	67% (n=39)	54% (n=31)	40% (n=6)	46% (n=6)	61% (n=17)	75% (n=6)	63% (n=12)
Neither satisfied nor dissatisfied	9% (n=5)	9% (n=5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)
Somewhat dissatisfied	10% (n=6)	9% (n=5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)
Extremely dissatisfied	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)	Data withheld (n=<5)