

VETERINARY WORKFORCE SURVEY 2023/2024

Analysis Report



AVA 2023/24 Workforce Survey Report

Table of contents

Introduction	3
Methodology.....	3
Data analysis.....	3
Findings	3
What are the population characteristics of the veterinary profession in 2023/24?.....	4
Methodology relevant to this section	4
Results.....	5
Discussion	11
Where did veterinarians study and what is their student debt profile?	12
Methodology relevant to this section	12
Results.....	12
Discussion	14
What type of work do people with veterinary degrees perform and where do they work?	16
Results.....	16
Discussion	17
What does clinical veterinary practice look like in 2023/2024?	19
Methodology relevant to this section	19
Results.....	19
Discussion	24
What are veterinarians' hours of work and remuneration?.....	26
Methodology relevant to this section	26
Results.....	26
Discussion	34
Limitations.....	36
Acknowledgements.....	36
Further information.....	36
References	37

Introduction

The Australian Veterinary Association (AVA), with assistance from the state and territory veterinary boards and the Australasian Veterinary Boards Council (AVBC), conducted its 7th workforce survey of veterinarians in 2023/24. The purpose of the survey was to collect data about the current profile of the veterinary profession and anticipate future trends and challenges. The information will help the profession, government, veterinary boards, and others to understand how the provision of veterinary services may be affected by various factors, including graduate numbers, changes in career, breaks in employment and those working part-time.

Methodology

The workforce survey was originally based on an adaptation from a similar survey administered each year by the Veterinary Council of New Zealand. The survey has been refined based on feedback. An online survey instrument was created using SurveyMonkey and was granted ethics approval through the University of Melbourne [Project ID: 27007]. Multiple avenues were utilised to promote the survey through AVA publications and events. State and Territory veterinary practice boards and Australian veterinary schools were asked to promote the survey through their communications, as were Federal and State and Territory Chief Veterinary Officers. A range of other stakeholders were also asked to promote the survey. The online survey was made available to veterinarians between 10 November 2023 and 16 February 2024. The survey was open to all veterinarians in Australia and veterinarians voluntarily completed the questionnaire. Questions asked in the survey confirmed this and allowed exclusion of respondents who did not fit these criteria.

Data analysis

Data collected were both categorical and continuous. Frequencies were calculated for the categorical data and mean (standard deviation) or median (range) were calculated for continuous data. When analysing categorical data Chi-squared tests were performed and analysis of the continuous data was done using the appropriate parametric or non-parametric test.

Findings

This report provides a summary of responses to the 2023/24 Veterinary Workforce Survey. A total of 2332 responses were recorded. Of these 2187 usable responses were extracted. The total number of registered veterinarians in Australia on 30 June 2023 was 15,261. The overall response rate to the survey (the number of veterinarians that provided valid responses to the survey divided by the total number of registered veterinarians) was 14.3%. Response rates across the country varied from 10% in WA to 16.9% in SA.

The response rate for this survey was higher than the 2018 (10%), similar to 2016 (14%), 2014 (15%) and 2012 (14%), but lower than the 2013 (29%) and 2021 (26.4%) survey response rates.

What are the population characteristics of the veterinary profession in 2023/24?

The theme of World Veterinary Day for 2023 was promotion of diversity, equity and inclusiveness in the veterinary profession, and the AVA celebrated this with a panel discussion on the topic. As the profession lacks data in this area, with the assistance of the Australian Rainbow Vets and Allies several questions were added to improve understanding of the diversity within the profession.

Methodology relevant to this section

Gender

Within this part of the survey respondents were asked to answer a broad range of questions to develop a more detailed understanding of the demographics of the veterinary profession as well as caring responsibilities they undertake.

With respect to gender, non-binary and autigender/neruoqueer were self identified. Cisgender and transgender categories were identified through a comparison of self-identified gender and birth sex, using the following definitions:

- Cisgender Woman or Female - respondents whose birth sex and current gender were Woman or Female.
- Transgender Woman or Female - respondents whose current gender were Woman or Female, but birth sex was different.
- Cisgender Man or Male - respondents whose birth sex and current gender were Man or Male.
- Transgender Man or Male - respondents whose current gender were Man or Male, but birth sex was different.

Respondents were also asked if they identify as intersex. This is defined as, “individuals who have innate sex characteristics that do not fit medical norms for male or female bodies.”

Unless otherwise indicated in specific sections, all other references to woman or female and man or male in this report provide data relating to cisgender women or females and cisgender men or males.

Chronic conditions or disabilities

Respondents were asked about their chronic conditions or disabilities. This included physical disabilities, chronic mental health conditions, chronic illness, and other chronic health conditions.

Respondents were also asked whether they identified as neurodivergent. Neurodivergent is a non-medical umbrella term that describes people with variation in their brain functions, cognitive processes, behaviours, and/or sensory processing. This includes, for example, attention deficit hyperactivity disorder (ADHD), autism spectrum conditions (this includes what was previously described as Asperger’s syndrome), dyslexia, dyscalculia, dysgraphia, Down syndrome, dyspraxia, Tourette syndrome, Williams syndrome, Prada-

Willi syndrome, apraxia, obsessive compulsive disorder, schizophrenia, schizoaffective disorder, personality disorders, bipolar disorder, traumatic/acquired brain injury, social anxiety disorder, sensory processing disorder, situational mutism, intellectual disability.

Results

Gender

Responses showed 69.73% were cisgender women or female , 29% were cisgender men or male, 0.18% were transgender women or female, 0.14% were transgender men or male, 0.5% identifying as non-binary, 0.14% as Autigender/Neuroqueer, and 0.41% preferring not to say.

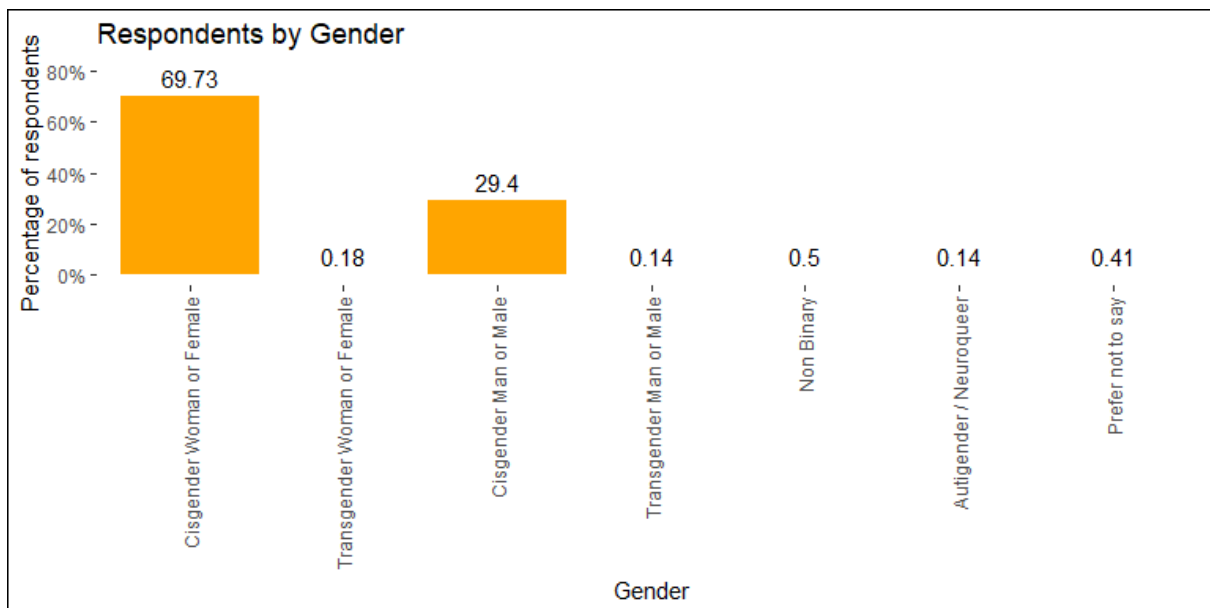


Figure 01 - Respondents by gender

Intersex

One third of a percent (0.3%) of respondents indicated they identify as intersex and 1.8% preferred not to say.

Sexuality

With respect to sexuality, 86% of respondents indicated they were heterosexual. 4.3% reported as bisexual and 4.8% preferred not to say.

Respondents were able to mark any responses that applied.

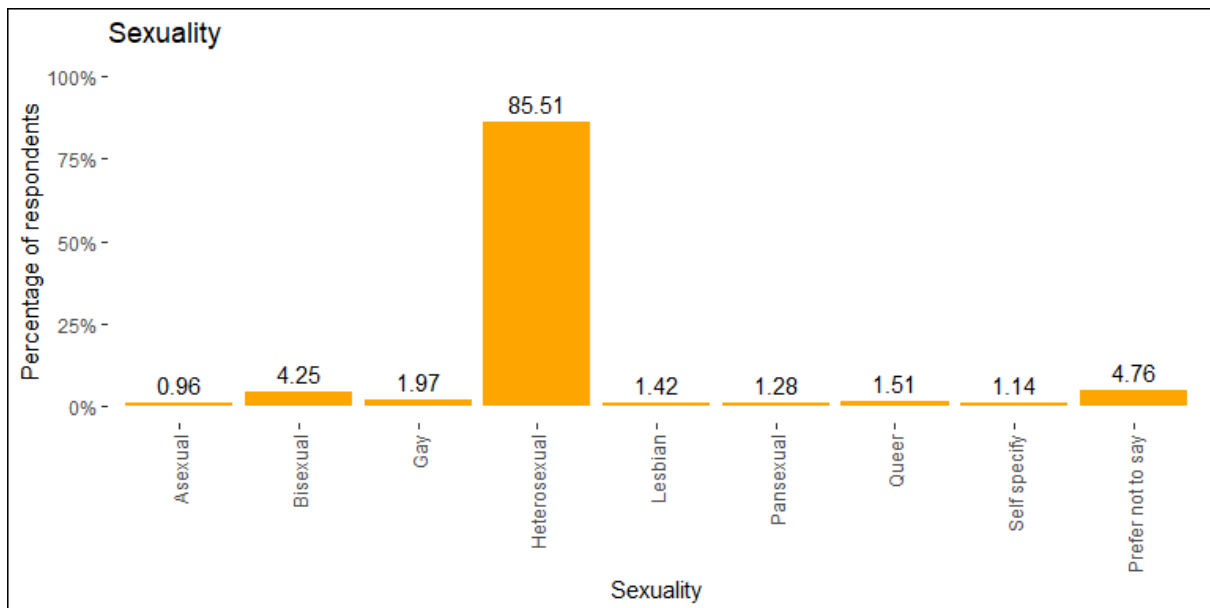


Figure 02 - Respondents by sexuality

Age

Fifty three percent of respondents were under the age of 45 years, with women making up the majority in each age group up to and including the 60-64 years category. Males made up the majority in the age groups above this.

Please note, here and in the remainder of the data in this report references to woman or female and man or male relate to cisgender women or females and cisgender men or males.

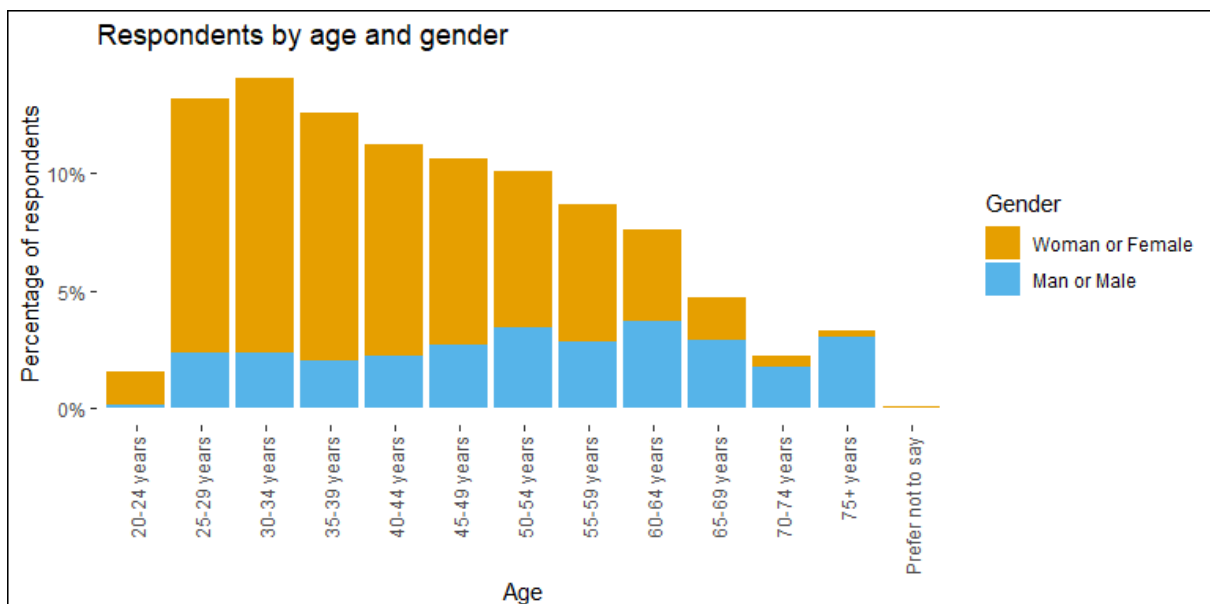


Figure 03 - Respondents by age and gender

Table 01 Respondents by age and gender

Age	Woman or Female	Man or Male	Total
20-24 years	31 (91%)	3 (8.8%)	34 (100%)
25-29 years	232 (82%)	51 (18%)	283 (100%)
30-34 years	252 (83%)	51 (17%)	303 (100%)
35-39 years	227 (84%)	44 (16%)	271 (100%)
40-44 years	193 (80%)	49 (20%)	242 (100%)
45-49 years	171 (75%)	58 (25%)	229 (100%)
50-54 years	142 (65%)	75 (35%)	217 (100%)
55-59 years	125 (67%)	62 (33%)	187 (100%)
60-64 years	84 (51%)	80 (49%)	164 (100%)
65-69 years	39 (38%)	63 (62%)	102 (100%)
70-74 years	11 (22%)	38 (78%)	49 (100%)
75+ years	6 (8.5%)	65 (92%)	71 (100%)
Prefer not to say	2 (100%)	0 (0%)	2 (100%)
Total	1,515 (70%)	639 (30%)	2,154 (100%)

Indigenous status

Of the total respondents, 0.6% identified as Aboriginal, 0.1% as Torres Strait Islander and less than 0.1% as both Aboriginal and Torres Strait Islander.

Table 02 Indigenous status

	Total
Aboriginal	14 (0.6%)
Torres Strait Islander	3 (0.1%)
Aboriginal and Torres Strait Islander	1 (<0.1%)
Neither Aboriginal or Torres Strait Islander	2,155 (99%)
Prefer not to say	14 (0.6%)
Total	2,187 (100%)

Region of Birth

Seventy four percent of respondents were born in Australia making it the most common region of birth. The UK and Ireland were next with 7.4% and other regions of birth over 1% of respondents were Africa (3%), Europe (2.8%), New Zealand (2.4%), North America (2.8%), and South East Asia / Philippines (2%).

Primary language

English was by far the most common primary language reported by 96% of respondents. Of the respondents whose primary language was not English (n = 89), the next largest proportions were Chinese (0.5%), Spanish (0.4%) and Afrikaans (0.3%).

The below table shows the distribution of languages among the 4% of respondents who indicated that English was not their primary language.

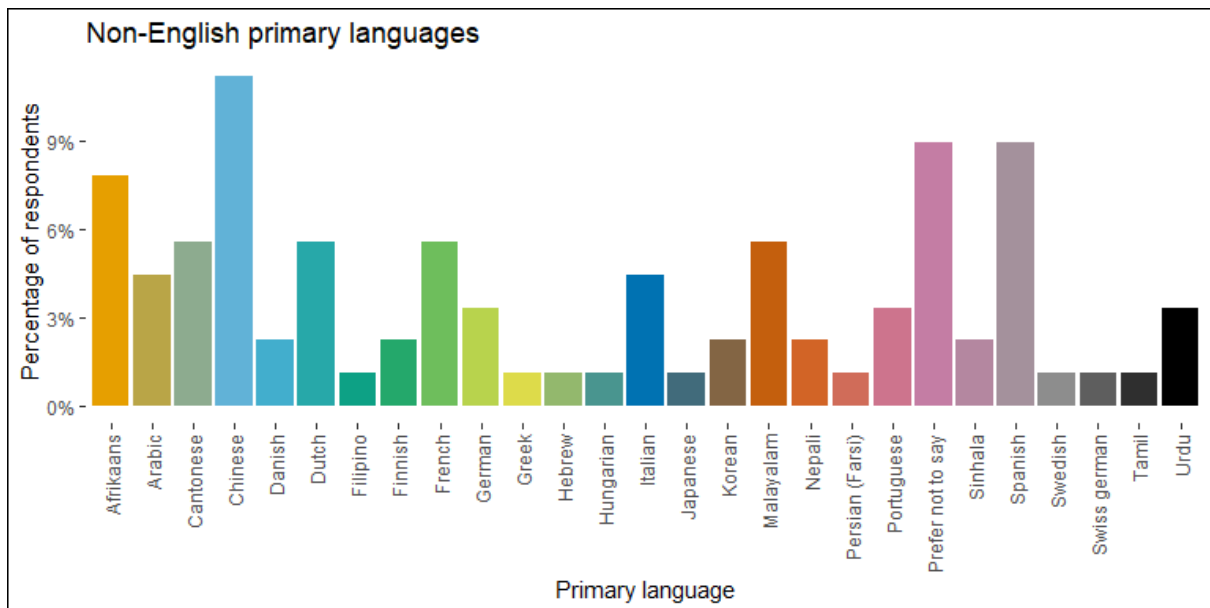


Figure 04 - Respondents non-English primary languages (n = 89)

Non-English languages known

More broadly, respondents were asked what other languages they spoke. Of the respondents that indicated they spoke a language other than English, the most common were French (5%), Chinese (4%), German, (3%) Spanish (2%), Hindi (2%), and Afrikaans (1%).

Religion

Almost a third (32.8%) of respondents identified as atheist with a further 24.2% being agnostic. Christianity was the largest identified religion (31.9%), with Buddhism (1.2%), Judaism (1.1%), and Hinduism (0.6%) being the next largest.

Presence of a disability, chronic condition or neurodivergence

Of the 2187 respondents 37.9% indicated that they identify as having a disability, chronic condition or neurodivergence.

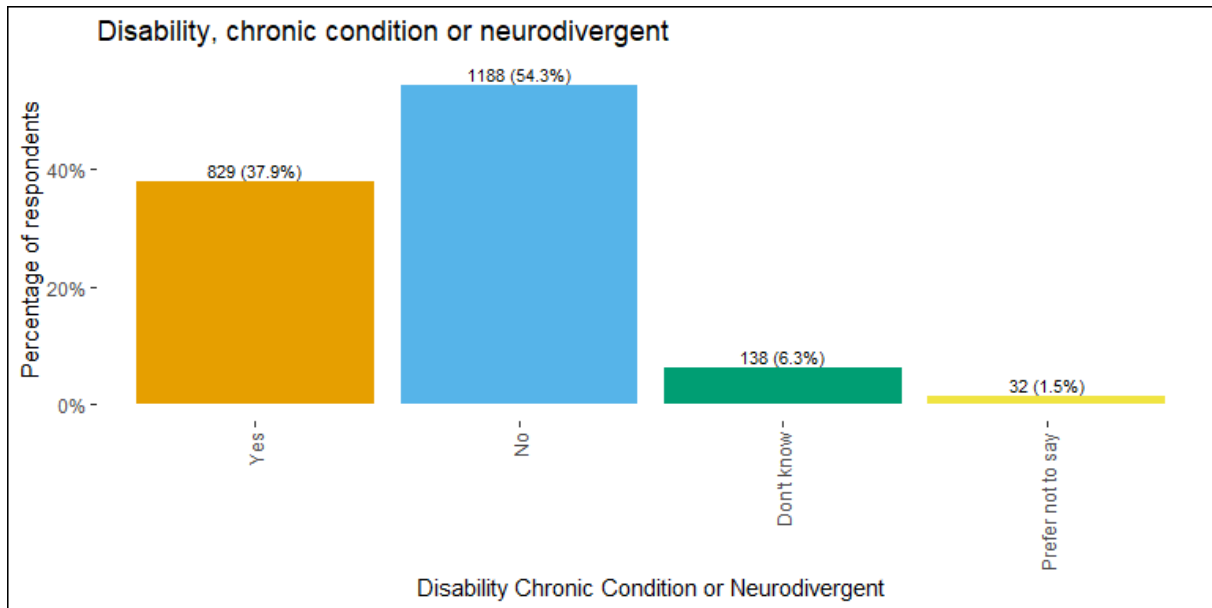


Figure 05 - Disability, chronic condition or neurodivergent (n=2187)

Identification as having a disability, chronic condition or being neurodivergent is slightly higher amongst women (40%) as compared to men (32%). It also higher in the 20-24 years (53%), 70-74 years (47%), and 75+ years (44%) age groups.

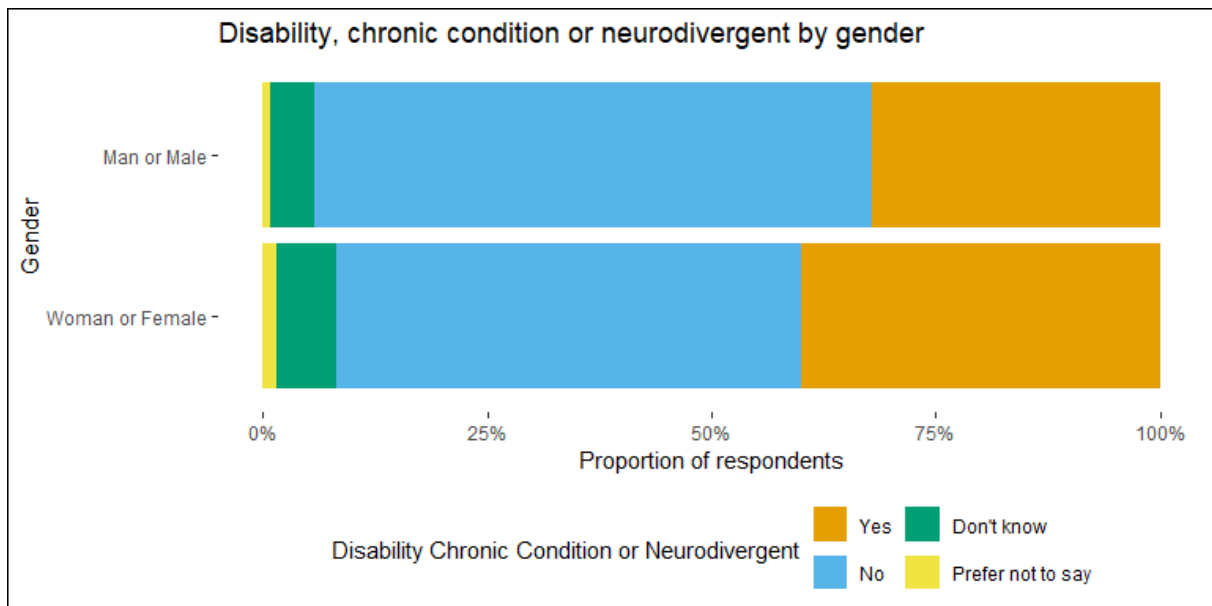


Figure 06 - Disability, chronic condition or neurodivergent by gender (n=2154)

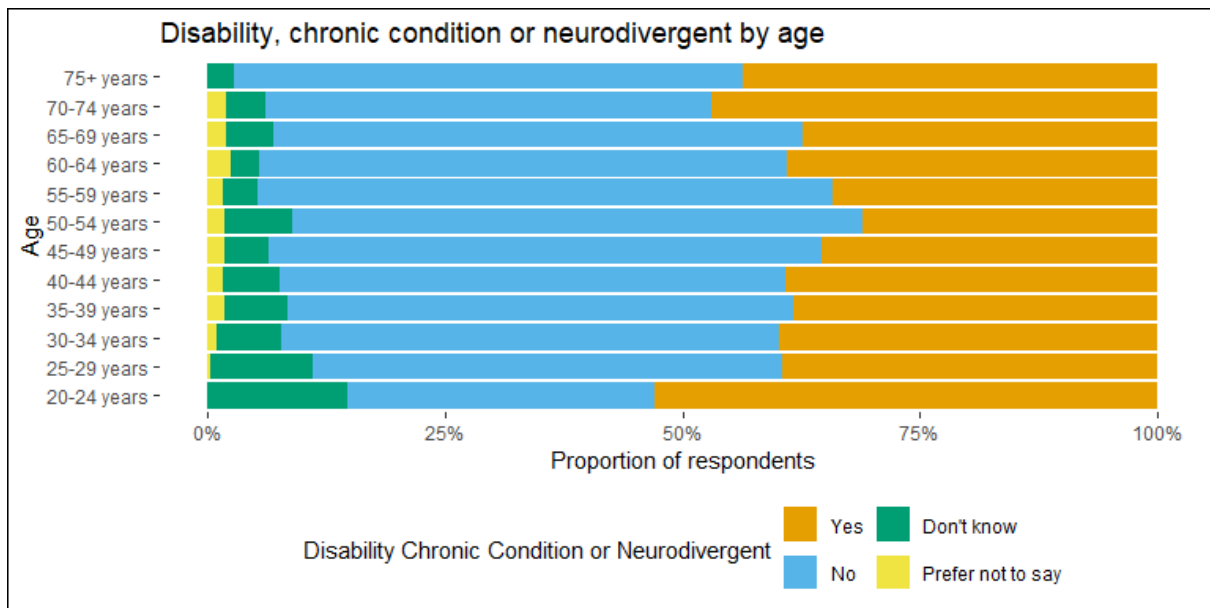


Figure 07 - Disability, chronic condition or neurodivergent by age (n=2152)

Caring responsibilities

Respondents were asked about their caring responsibilities with 41% indicating that they undertook these responsibilities. Twelve percent indicated that they cared for a pre-school or younger child, 17% a primary school child, and 16% a secondary school child. A further 4% care for a person with a physical or mental impairment and 4.4% a frail or aged person. Forty three percent of females and 36% of males undertook caring responsibilities. Caring responsibilities were more likely to occur in the 35-55 age ranges in both males and females.

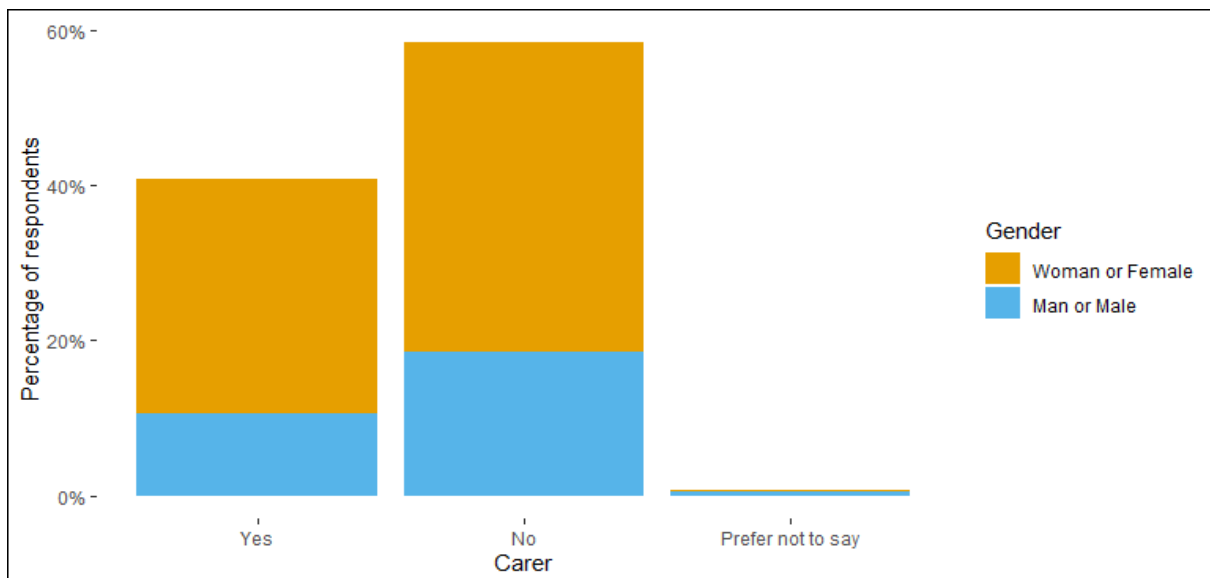


Figure 08 - Caring responsibilities by gender (n=2154)

Discussion

The gender distribution of the veterinary profession continues to skew towards females, with the 69% of respondents identifying as female in 2023/24. The percentage of female respondents increases at each iteration of the survey, in 2012, 54% of respondents were female, in 2016 it was 62%, in 2018 it was 66%, and in 2021 it was 67% (AVA, 2021; AVA, 2019; AVA, 2017; AVA, 2013). Given that at least 80% of people entering the veterinary degree are female this change in gender demographic of the profession is not unexpected (VSANZ, 2023).

The percentage of females in the veterinary profession is significantly higher than in the broader Australian labour force. In the 2021 ABS Census, 48.40% of the labour force identified as female (ABS, 2022).

Region of birth

The 74% of respondents born in Australia is similar to the broader Australian population where 72.4% were born in Australia. England is also the most common country of birth outside of Australia for the general population. However, in contrast to the survey respondents, India and China are the next largest (ABS, 2022).

More broadly, the five top ancestries in Australia according to the 2021 ABS Census were English (33.0 per cent), Australian (29.9 per cent), Irish (9.5 per cent), Scottish (8.6 per cent) and Chinese (5.5 per cent) (ABS, 2022).

Non English language spoken

According to the 2021 ABS Census, the top five languages (other than English) used at home in Australia were Mandarin (2.7 per cent), Arabic (1.4 per cent), Vietnamese (1.3 per cent), Cantonese (1.2 per cent) and Punjabi (0.9 per cent) (ABS, 2022).

This is significant as the languages spoken by veterinarians impact on the ability of the profession to service a culturally diverse community.

Languages known by survey respondents go some way to addressing this, with 4% speaking Chinese, however the other more common languages known are more European centric.

Where did veterinarians study and what is their student debt profile?

Methodology relevant to this section

Data analysis

Data were grouped into graduation year groupings and student debt of males and females was compared. Data were not normally distributed and a Mann-Whitney U test was used to make the comparison.

Results

University where veterinary degree obtained

Of the survey respondents, the majority graduated from an Australian university.

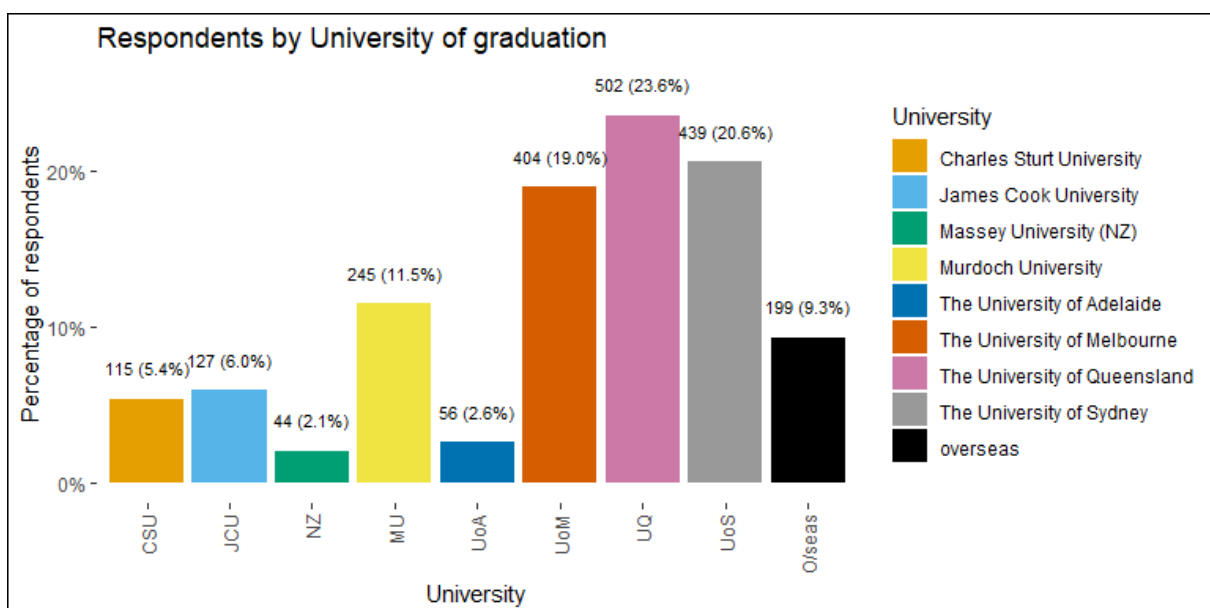


Figure 09 - Respondents by University of graduation (n=2131)

Just over half (55.3%) of respondents were practicing in the same state as the university that they graduated from.

University where degree obtained and location of work (regional or metro)

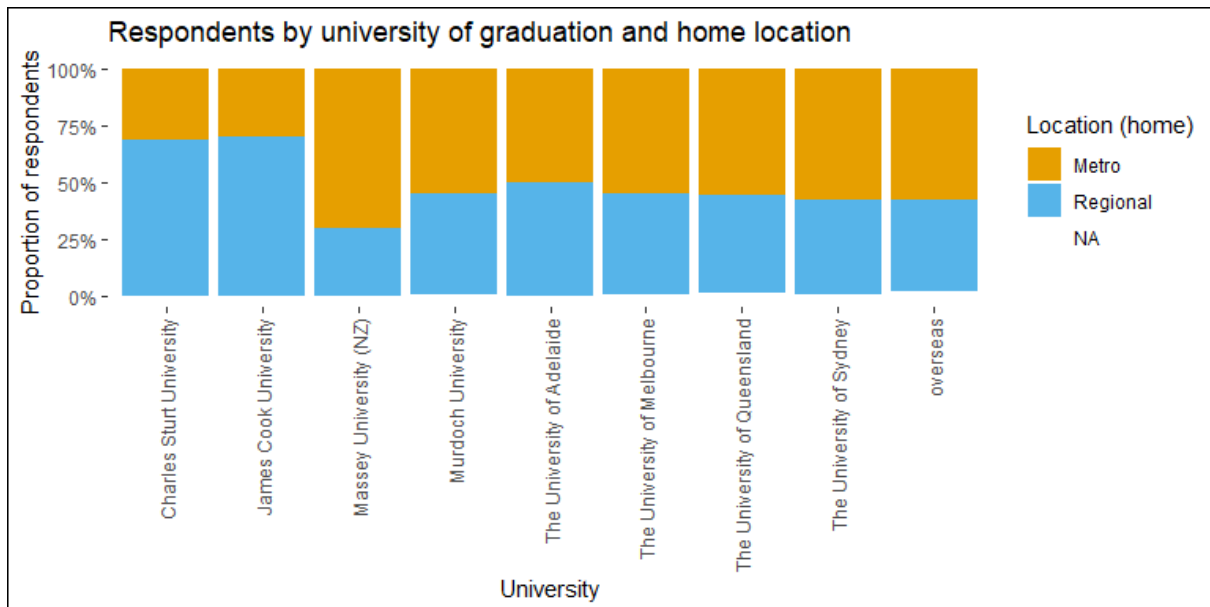


Figure 10 - Respondents by university of graduation and home location (n=2131)

Year of graduation

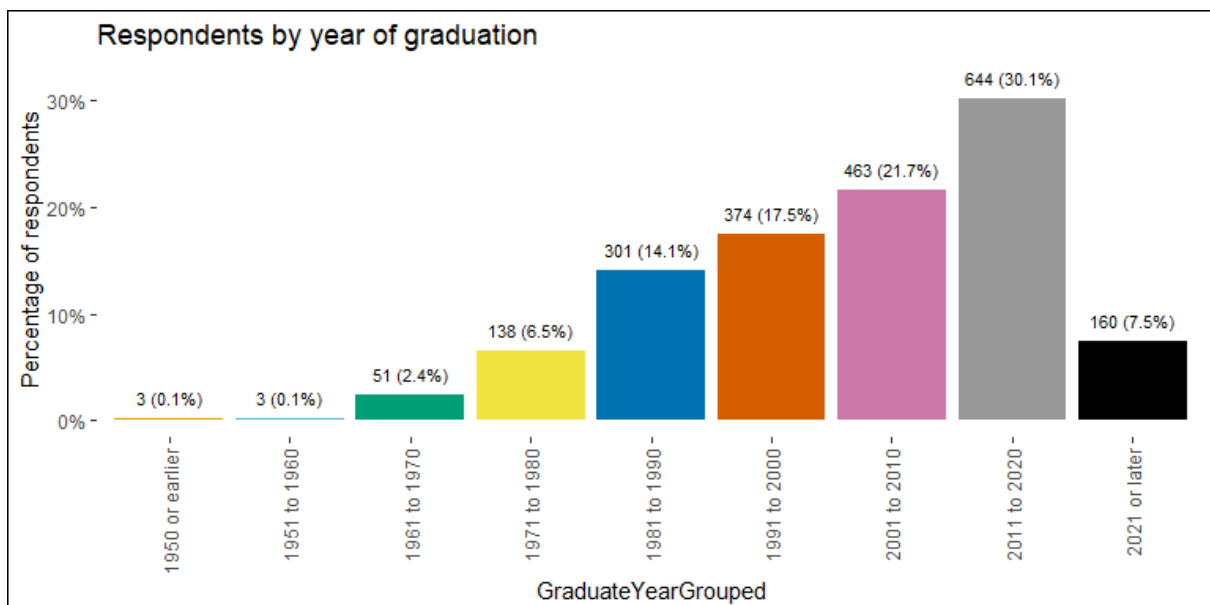


Figure 11 - Respondents by year of graduation (n=2137)

Student debt at graduation

Student debt was considered for the first time in the AVA 2023/24 Workforce Survey. It found that 62.4% of respondents had debt at graduation. This debt was highest for females (median \$56,000) and lowest for males (median \$39,000) (Table 03). When debt levels between males and females were analysed for individual graduation year groupings, no significant difference was found.

Level of debt and relationship between year of graduation

Table 03 Student debt at graduation by gender

Gender	Lower	Median	Upper	Range	IQR	n
Woman or Female	70	56,000	830,000	829,930	43,500	756
Man or Male	1,000	39,000	400,000	399,000	50,000	212

Table 04 Student debt at graduation by year of graduation

Graduation Year	Lower	Median	Upper	Range	IQR	n
1961 to 1970	5,000	5,250	5,500	500	250	2
1971 to 1980	1,000	3,000	50,000	49,000	24,500	3
1981 to 1990	770	5,000	70,000	69,230	7,000	49
1991 to 2000	2,000	15,000	150,000	148,000	16,000	191
2001 to 2010	2,000	40,000	300,000	298,000	30,000	241
2011 to 2020	70	65,000	830,000	829,930	25,000	390
2021 or later	30,000	84,640	500,000	470,000	33,000	108

The growth in debt exceeds CPI over the same period.

Time taken to pay off debt

Of the respondents who reported having a debt at graduation, approximately half (49.9%) were still paying it off. Of those who had paid it off, the median time for males (n = 170) to pay it off was 5 years and females (n = 376) 8 years (Table 05).

Table 05 Time taken to pay off debt

Gender	Lower	Median	Upper	Range	IQR	n
Woman or Female	0	8	28	28	5	376
Man or Male	1	5	20	19	7	170

Discussion

The university where veterinary degree obtained is reflective of the relative time that different universities have been operating. University of Queensland, Sydney and Melbourne having the higher numbers of graduating respondents, then Murdoch and finally Charles Sturt University (CSU), James Cook University (JCU) and University of Adelaide. When graduation years post the commencement of graduates from the University of Adelaide (the most recent veterinary school to be established) are considered, there is a more even distribution of graduating universities.

Where they practice

Just over half (55.3%) of respondents were practicing in the same state as the university that they graduated from, this a reduction from 61% in the 2018 AVA Workforce Survey. (AVA, 2019)

Graduates of CSU and JCU were more likely to be practicing in regional areas than graduates from metropolitan based universities. This finding is consistent with other reports. (Hyams et al., 2017)

Student debt at graduation

This is the first time that data has been collected by AVA around student debt. The data suggests that levels of debt have been increasing over time, which is likely due to the incremental increases in higher education contributions by commonwealth funded students and increasing fees for full fee paying students.

Overall debt is likely to be higher for females and the time taken to pay off that debt is longer because of the higher proportion of more recent graduates being female.

What type of work do people with veterinary degrees perform and where do they work?

Results

Field of work

Survey respondents were asked what their primary occupation was and the field that they worked in. Categories used mirrored previous AVA Workforce surveys, but were also aimed at being comparable with ABS classifications.

Table 06 Field of work by Primary occupation

Field of work	Farmer	Lecturer	Other (please specify)	Veterinarian	Veterinary nurse	Unknown	Total
Academia/ Tertiary/ Research	0 (0%)	24 (92%)	22 (16%)	30 (1.7%)	0 (0%)	0 (0%)	76 (3.9%)
Agriculture	6 (46%)	0 (0%)	7 (5.1%)	9 (0.5%)	0 (0%)	0 (0%)	22 (1.1%)
Clinical veterinary practice	4 (31%)	1 (3.8%)	20 (15%)	1,485 (85%)	10 (83%)	0 (0%)	1,520 (78%)
Government	1 (7.7%)	0 (0%)	22 (16%)	120 (6.8%)	0 (0%)	0 (0%)	143 (7.3%)
Industry	0 (0%)	0 (0%)	20 (15%)	40 (2.3%)	1 (8.3%)	0 (0%)	61 (3.1%)
Laboratory	1 (7.7%)	0 (0%)	2 (1.5%)	14 (0.8%)	0 (0%)	0 (0%)	17 (0.9%)
Other (please specify)	1 (7.7%)	1 (3.8%)	44 (32%)	55 (3.1%)	1 (8.3%)	0 (0%)	102 (5.2%)
Unknown	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	8 (100%)	8 (0.4%)
Total	13 (100%)	26 (100%)	137 (100%)	1,753 (100%)	12 (100%)	8 (100%)	1,949 (100%)

Of those who stated their primary occupation was veterinarian (90%), 85% of those people (n=1485) worked in clinical veterinary practice, 6.8% (n = 120) worked in government, and 2.3% (n=40) worked in industry. Other fields of work included Academia/Tertiary/Research, agriculture, industry, laboratory, or other.

State and regions

Respondents were spread across the country with the largest number from Victoria (29%) and the smallest from Northern Territory (1.2%). Overall, 54% of respondents were from metropolitan areas and 45% were from regional (Table 07). The allocation of responses as located in a metropolitan and regional area was twofold. For respondents who provided their postcode, this was categorised based on Australia Post classifications. Those respondents who did not provide their postcode were asked to indicate their state and whether they were in metropolitan or regional areas.

Table 07 Respondents by location

State (home)	Metro	Regional	Unknown	Total
ACT	49 (96%)	1 (2.0%)	1 (2.0%)	51 (100%)
NSW	239 (46%)	277 (54%)	1 (0.2%)	517 (100%)
NT	2 (7.4%)	25 (93%)	0 (0%)	27 (100%)
QLD	320 (58%)	233 (42%)	0 (0%)	553 (100%)
SA	98 (64%)	56 (36%)	0 (0%)	154 (100%)
TAS	28 (53%)	25 (47%)	0 (0%)	53 (100%)
VIC	314 (49%)	323 (51%)	1 (0.2%)	638 (100%)
WA	122 (69%)	55 (31%)	1 (0.6%)	178 (100%)
O/seas	5 (83%)	1 (17%)	0 (0%)	6 (100%)
Unknown	0 (0%)	0 (0%)	10 (100%)	10 (100%)
Total	1,177 (54%)	996 (45%)	14 (0.6%)	2,187 (100%)

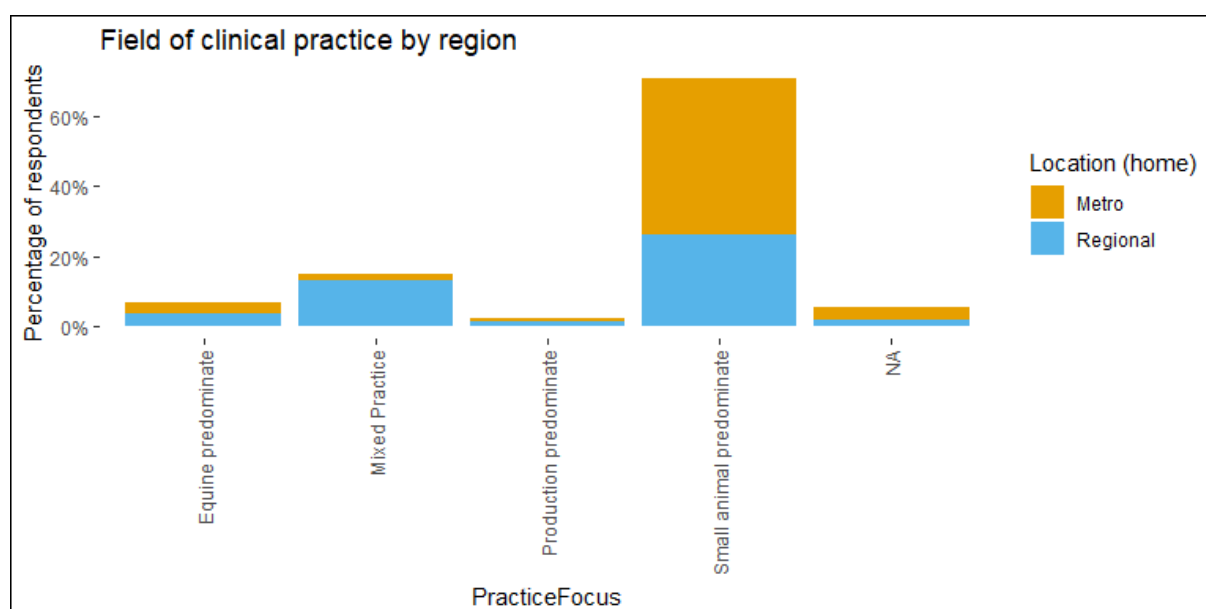


Figure 12 - Field of clinical practice by region (n = 1517)

Specialists

Of the respondents, 5.7% (n = 2,134) indicated that they were specialists with medicine and surgery being the largest specialties.

Discussion

In examining ABS Census data from 2021, Pratt (2023) found that 69.7% of persons with veterinary science qualifications worked in clinical veterinary practice. This contrasts with the survey results 78% practice respondents working in clinical veterinary practice. The percentage of respondents who indicated they worked in government (7.3%) also exceeds the estimated value from Pratt, which estimated government veterinarians to make up 3.11% of the workforce.

Field of work

The number of respondents working in clinical veterinary practice was similar to previous surveys. (AVA, 2021; AVA, 2019; AVA, 2017; AVA, 2013)

Specialists

The number of respondents identifying as specialists was similar to previous surveys. (AVA, 2021; AVA, 2019; AVA, 2017; AVA, 2013)

What does clinical veterinary practice look like in 2023/2024?

Methodology relevant to this section

The next section focuses on clinical practice and presents a range of data from survey respondents. Data was filtered to isolate those respondents who indicated they worked in clinical veterinary practice. All percentages derived in this section are from the 1520 responses that worked in clinical veterinary practice.

Practice focus

Respondents have been grouped into broad areas of practice focus. The method used here utilised the categories listed under the hours worked in different areas. Species were grouped into small animal, equine, and production animal, then the remainder of the ancillary categories were divided on an individual respondent pro rata basis between these three categories. Where time spent on one group was 90% or greater, this was assigned as predominantly that group. The remainder were allocated to mixed practice.

Importantly, this grouping is based on individual veterinarians, not the clinics. Within a clinic there may be veterinarians who focus on different areas. For example, a mixed practice clinic may have staff who work predominantly on small animals and others who are more mixed practice or work predominately on production or equine.

Results

Employment status

Respondents were asked for their role in the practice. The majority of these were employed veterinarians (62.7%), with just over a quarter being practice owners (27.5%). Locums and consultants made up 5.5% and 1.6% respectively.

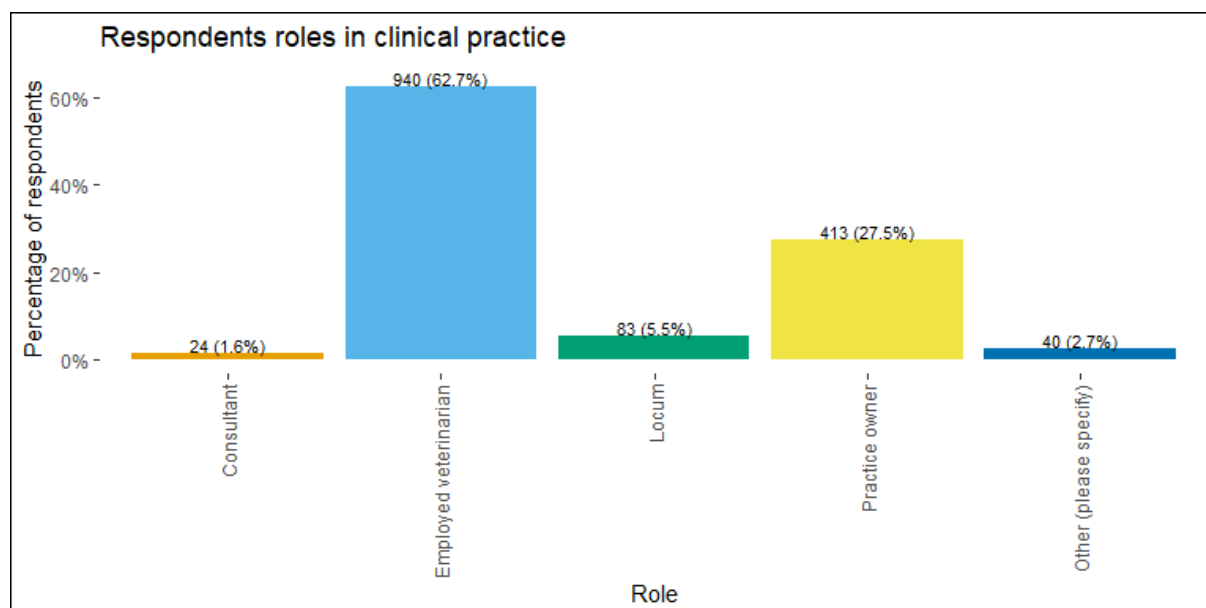


Figure 13 - Respondents by role in clinical practice (n=1717)

Practice type

Of the respondents working in clinical practice, over three quarters (76.3%) reported being in general practice. A further 14% were in either emergency, specialist, or both. There were 4.5% reporting mobile practice and 0.2% in teleconsultation.

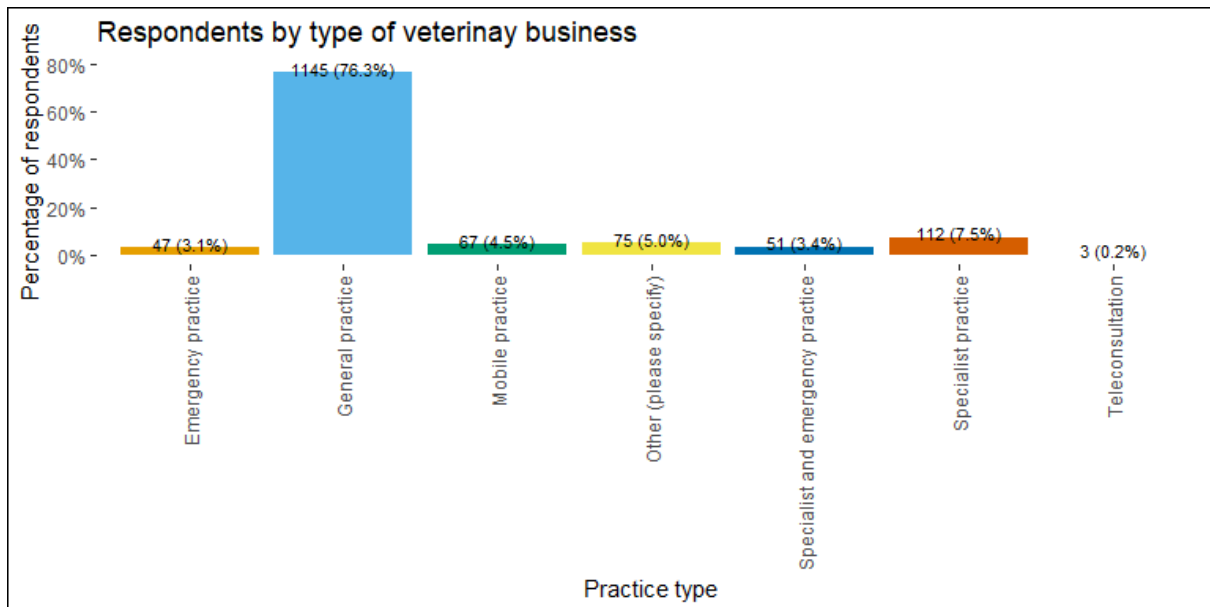


Figure 14 - Respondents by type of veterinary business (n=1500)

Practice size

The size of the practices was measured by full-time equivalent veterinarians.

The results in Figure 15 are based on responses from individual veterinarians rather than individual businesses.

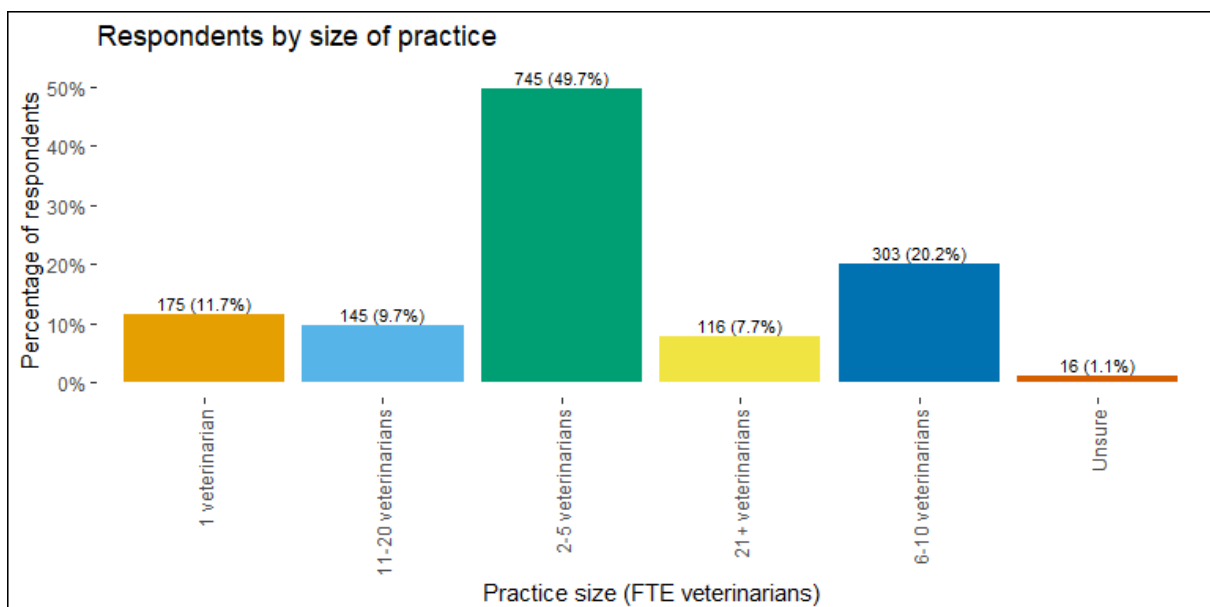


Figure 15 - Respondents by size of practice (n=1500)

Practice model

In terms of models of ownership, almost half (47.3%) were privately owned single practices. A further 14.5% were private practices with branch clinics. 11.7% were group practices and almost a quarter (23.3%) were corporate practices.

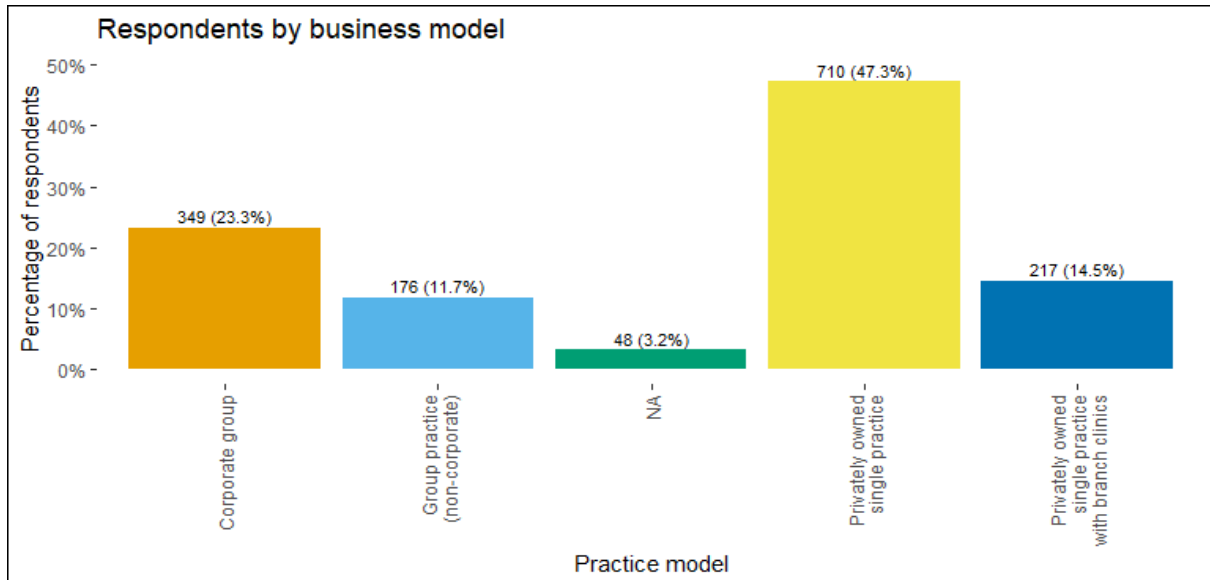


Figure 16 - Respondents by business model (n=1500)

Practice focus

Small animal practice was the largest group with 70.4% of respondents. The next largest was mixed practice (15.6%) followed by equine (7.7%) and production (6.4%).

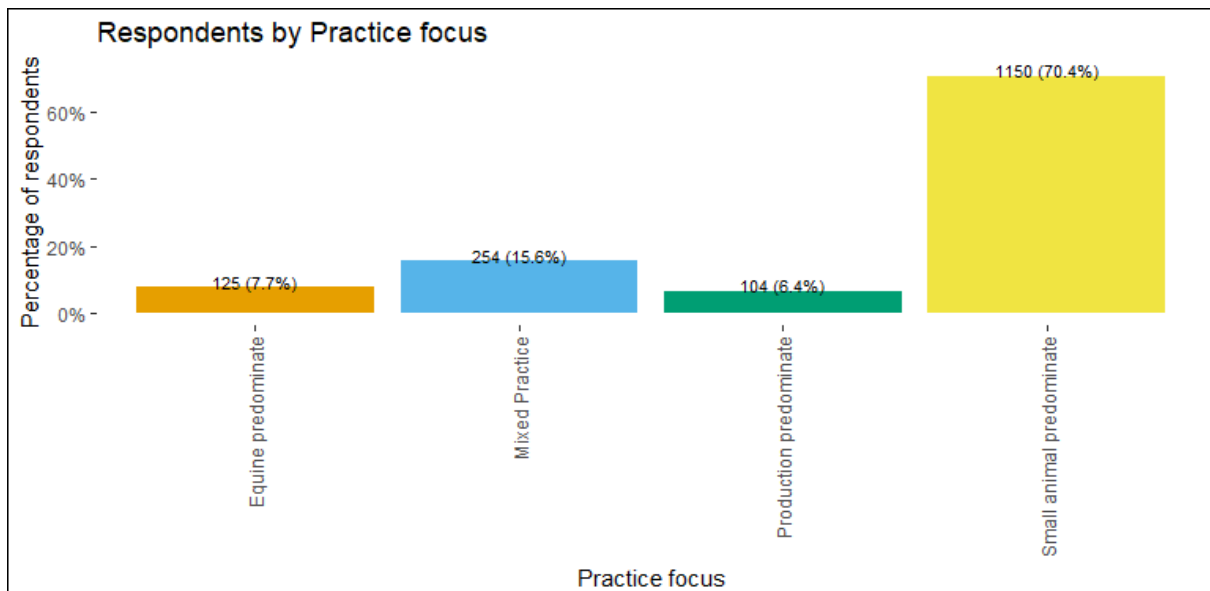


Figure 17 - Respondents by practice focus (n=1624)

Recruitment

Those respondents who were practice owners were asked about their recruitment in the past year. Of these, 57.5% indicated they had advertised for a veterinary role (n=414). Just over forty-two percent (42.3%) of these were for new roles and 57.7% were to replace staff.

Over half of the vacancies took longer than 6 months to fill and 36.8% took longer than 12 months, or remained unfilled.

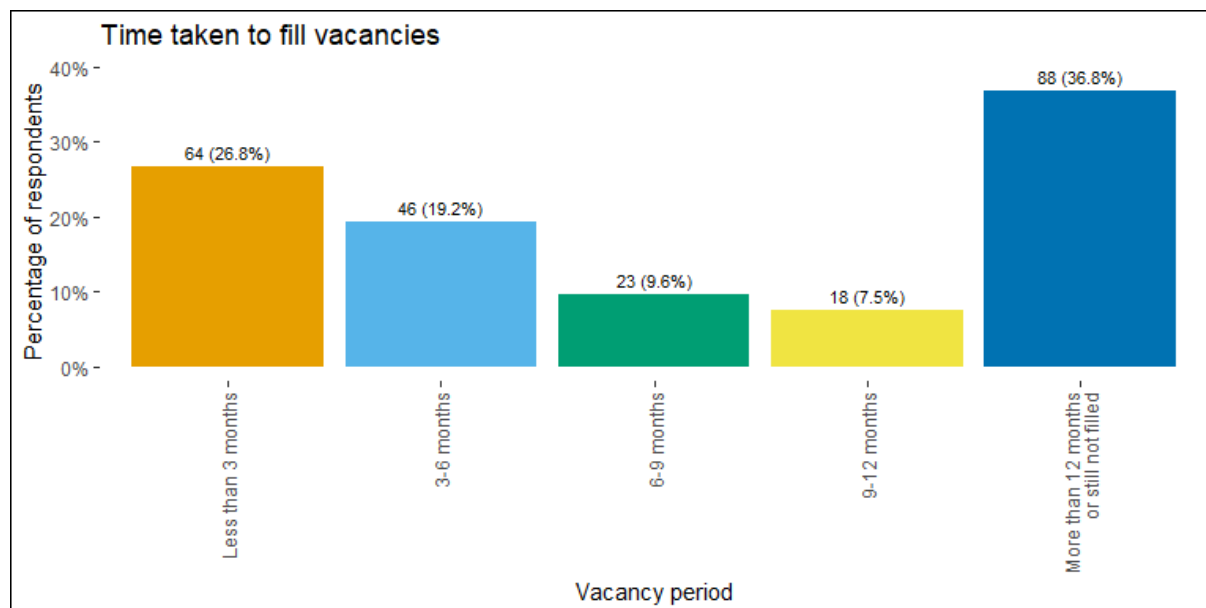


Figure 18 - Time taken to fill vacancies (n=239)

When practice location is considered, in the 2023 results, vacancies times were more protracted in regional areas than in metropolitan areas (Table 08). Further, when the size of the practice is considered, vacancy times were longer in smaller practices (Table 11).

Table 08 Vacancy period by location

Location (home)	Less than 3 months	3-6 months	6-9 months	9-12 months	More than 12 months or still not filled	Total
Metro	38 (36%)	22 (20%)	12 (11%)	6 (5.5%)	31 (28%)	109 (100%)
Regional	26 (20%)	24 (18%)	11 (8.5%)	12 (9.2%)	57 (44%)	130 (100%)
Total	64 (27%)	46 (19%)	23 (9.6%)	18 (7.5%)	88 (37%)	239 (100%)

Table 09 Vacancy period by state or territory

State (home)	Less than 3 months	3-6 months	6-9 months	9-12 months	More than 12 months or still not filled	Total
ACT	0 (0%)	2 (50%)	1 (25%)	0 (0%)	1 (25%)	4 (100%)
NSW	11 (18%)	7 (12%)	6 (10%)	6 (10%)	30 (50%)	60 (100%)
NT	1 (17%)	0 (0%)	0 (0%)	1 (17%)	4 (67%)	6 (100%)
QLD	22 (38%)	12 (21%)	7 (12%)	2 (3.4%)	15 (26%)	58 (100%)
SA	6 (25%)	8 (33%)	1 (4.2%)	1 (4.2%)	8 (33%)	24 (100%)
TAS	1 (10%)	0 (0%)	1 (10%)	1 (10%)	7 (70%)	10 (100%)
VIC	16 (28%)	14 (24%)	7 (12%)	5 (8.6%)	16 (28%)	58 (100%)
WA	7 (37%)	3 (16%)	0 (0%)	2 (11%)	7 (37%)	19 (100%)
O/seas	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)
Total	64 (27%)	46 (19%)	23 (9.6%)	18 (7.5%)	88 (37%)	239 (100%)

Table 10 Vacancy period by practice focus

Practice Focus	Less than 3 months	3-6 months	6-9 months	9-12 months	More than 12 months or still not filled	Total
Equine predominate	3 (16%)	6 (32%)	2 (11%)	2 (11%)	6 (32%)	19 (100%)
Mixed Practice	8 (16%)	12 (24%)	6 (12%)	6 (12%)	18 (36%)	50 (100%)
Production predominate	0 (0%)	1 (50%)	0 (0%)	0 (0%)	1 (50%)	2 (100%)
Small animal predominate	48 (31%)	25 (16%)	12 (7.6%)	10 (6.4%)	62 (39%)	157 (100%)
Unknown	5 (45%)	2 (18%)	3 (27%)	0 (0%)	1 (9.1%)	11 (100%)
Total	64 (27%)	46 (19%)	23 (9.6%)	18 (7.5%)	88 (37%)	239 (100%)

Table 11 Vacancy period by practice size

Practice size by number of FTE veterinarians	Less than 3 months	3-6 months	6-9 months	9-12 months	More than 12 months or still not filled	Total
1 veterinarian	1 (5.0%)	3 (15%)	2 (10%)	0 (0%)	14 (70%)	20 (100%)
2-5 veterinarians	34 (26%)	20 (15%)	9 (6.8%)	12 (9.0%)	58 (44%)	133 (100%)
6-10 veterinarians	17 (35%)	12 (24%)	7 (14%)	4 (8.2%)	9 (18%)	49 (100%)
11-20 veterinarians	10 (42%)	7 (29%)	3 (13%)	1 (4.2%)	3 (13%)	24 (100%)
21+ veterinarians	2 (15%)	4 (31%)	2 (15%)	1 (7.7%)	4 (31%)	13 (100%)
Unsure	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)	0 (NA%)
Total	64 (27%)	46 (19%)	23 (9.6%)	18 (7.5%)	88 (37%)	239 (100%)

Discussion

Employment status

The percentage of respondents who identified as employees, practice owners and locums was similar to the AVA workforce survey conducted in 2021.

Practice type and focus

Comparison to previous surveys is challenging, however compared to the 2021 survey there appeared to be a lower percentage of mixed animal practitioner respondents, and greater percentages of respondents from equine practice, production animal practice, specialty practice and companion animal practice (AVA 2021). If this trend continued in future surveys it would support the anecdotal rhetoric that the maintaining mixed practice viability with the current veterinary business model is becoming unsustainable.

Practice size

It is challenging to compare to the 2021 survey as the categorisation between surveys differed (AVA, 2021). However the number of veterinarians participating in solo practice is similar to that of the 2016 survey (AVA, 2017).

Practice model

Twenty three percent of respondents worked in a corporate practice model, compared to 8% in 2021, 7% in 2018, 4% in 2016 and 2% in 2012 (AVA, 2013; AVA, 2017; AVA, 2019; AVA, 2021).

Recruitment

The 2018 AVA Workforce Survey commenced asking questions around recruitment of veterinarians and the time that recruitment takes. The results in 2023 are similar to the 2021 results where 38.65% of respondents had vacancies that took 12 months or longer to fill, and higher than the 2018 results (24%). (AVA, 2019; AVA, 2021)

In analysing the vacancy times in regional areas further, there appears to be an inverse correlation between the size of the practice and the length of time that vacancies take to fill. Seventy percent of vacancies in 1 FTE veterinarian practices take 12 months or longer to fill, as compared to 44% in 2-5 FTE veterinarian practices or 18% in 6-10 FTE veterinarian practices.

This is not surprising as after-hours workload is a recognised deterrent for veterinarians practicing. In smaller practices there is less scope to share this workload.

What are veterinarians’ hours of work and remuneration?

Methodology relevant to this section

Working Hours

Working hours in the survey were discussed in three aspects:

- The weekly number of hours worked during a standard business day (excluding after-hours)
- The weekly number of hours spent on-call
- The weekly number of hours spent having been called in after-hours

Hourly rate

Respondents were asked to estimate their effective hourly rates. Survey questions for these sections offered options between 0-\$500. When assessing hourly rate and location only data from respondents working in clinical veterinary practice were analysed.

Data analysis

Data were not normally distributed and data were statistically assessed using the Mann Whitney U test or a Kruskal-Wallis test.

Results

Do practices pay for professional memberships and registration?

Respondents were asked if the practice they worked in paid their AVA membership, veterinary practice board registration or specialty college dues.

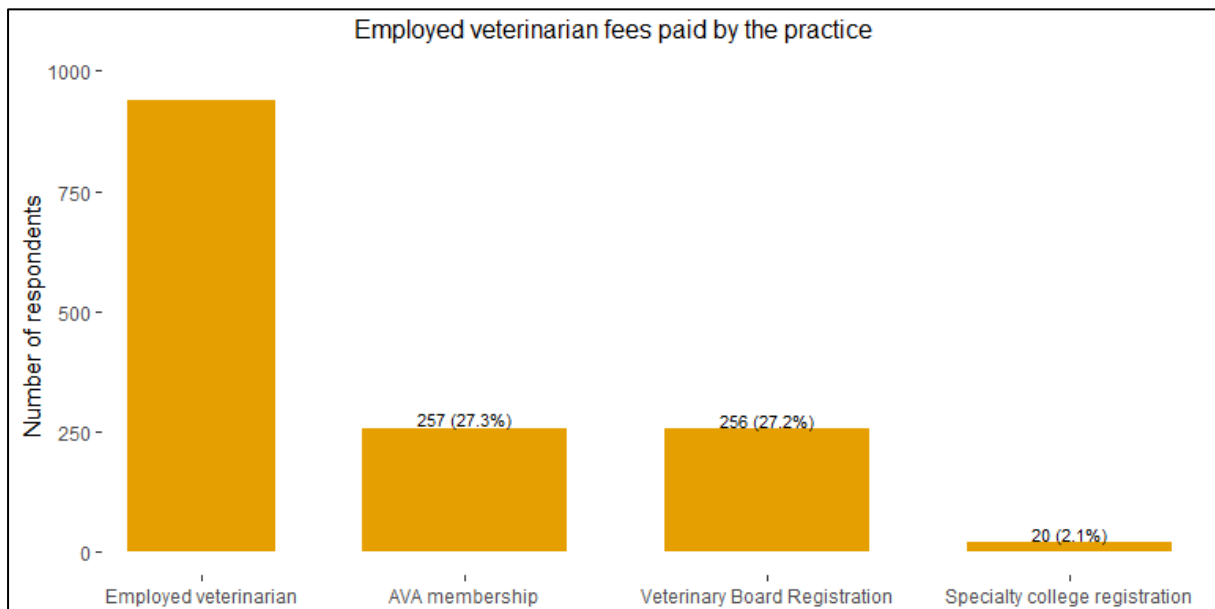


Figure 19 - Employed veterinarians fees paid by the practice (n=940)

Working hours

Hours worked data was not normally distributed.

Working hours and gender

The number of hours worked by males and females significantly differed ($p = 6.87e-14$).

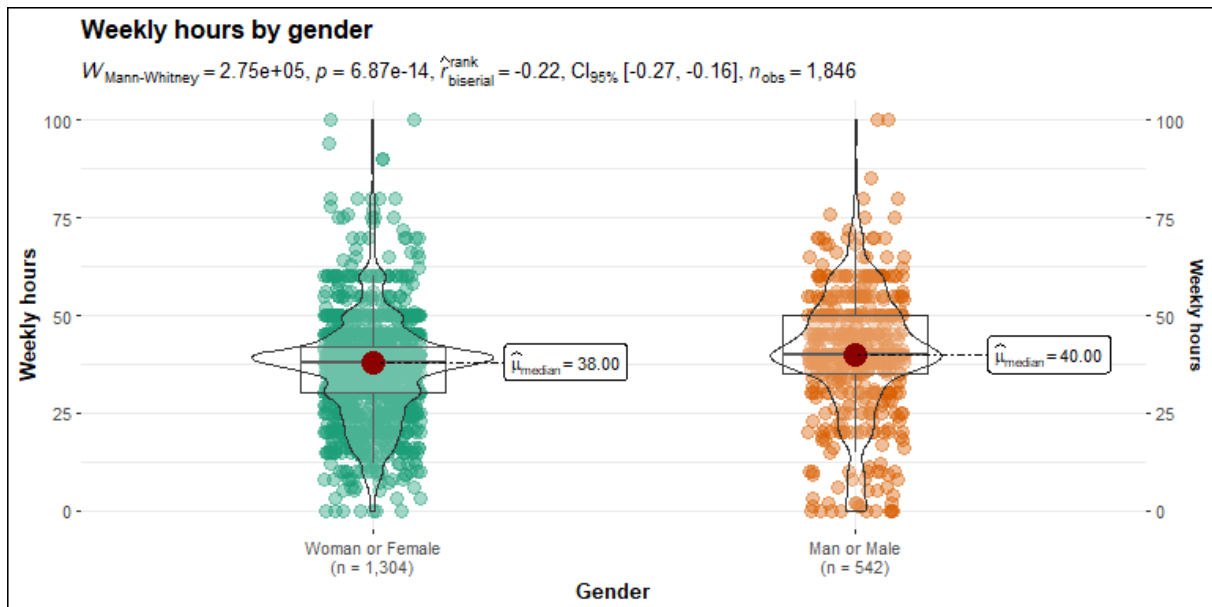


Figure 20 - Weekly hours by gender (n=1846)

Working hours and location

The number of hours worked by veterinarians in regional areas was significantly different from those who worked in metropolitan areas, ($p = 3.23e-04$), although the difference in hours worked was small.

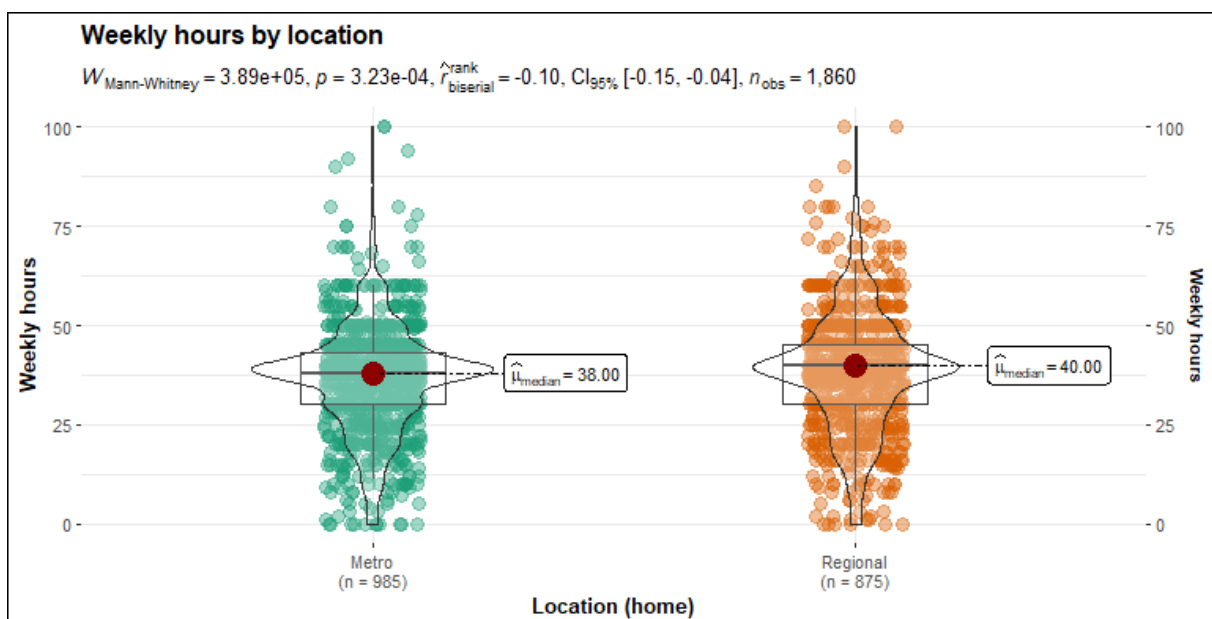


Figure 21 - Weekly hours by location (n=1860)

Working hours and practice focus

There were significant differences between the median working hours in small animal predominant practice as compared to each of production animal predominant, equine predominant and mixed practice.

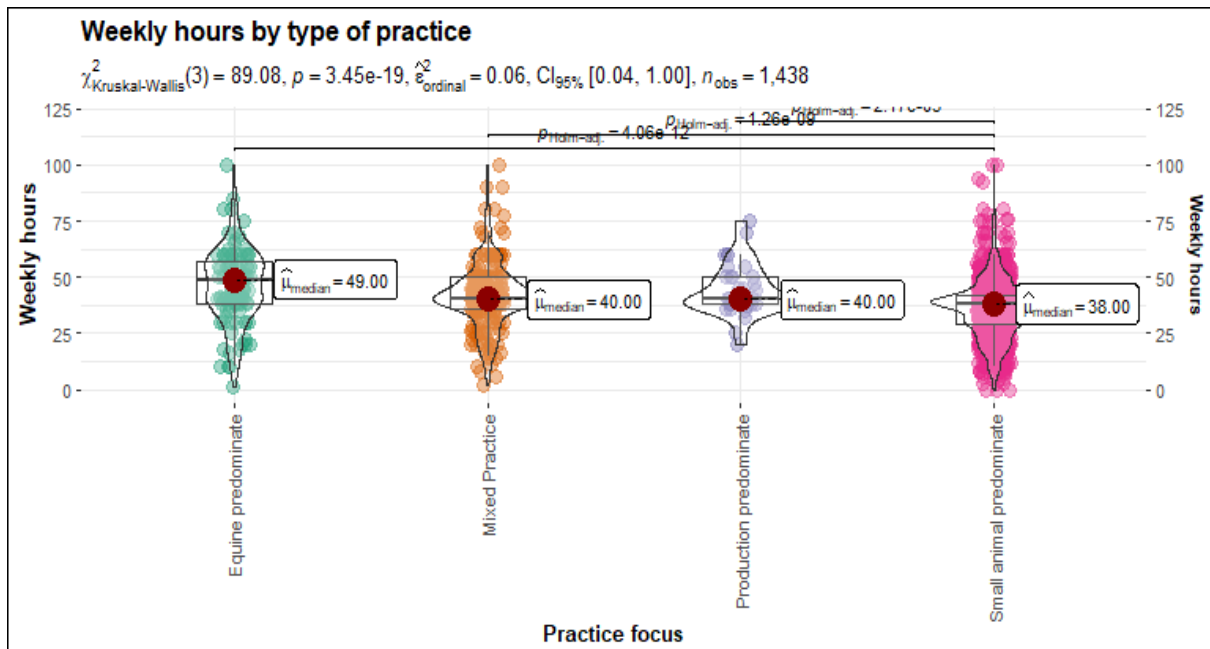


Figure 22 - Weekly hours by type of practice (n=1438)

After hours (on call and called back)

Thirty percent of respondents reported doing on-call hours. The data presented below focuses on differences between metropolitan and regional clinical practice as well as types of clinical practice.

By location

There was a significant difference between on-call hours in clinical veterinary practice in metropolitan areas compared with regional areas ($p = 8.33e-49$).

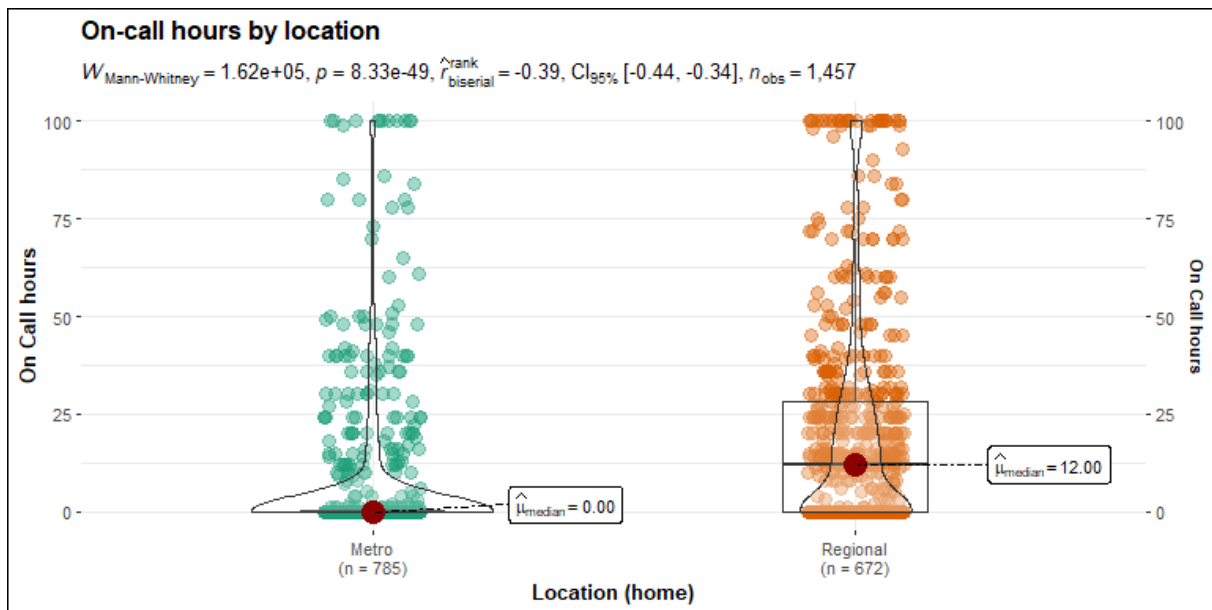


Figure 23 - On-call hours by location (n=1457)

By practice focus

There were significant differences between hours on call between small animal practice, production animal practice and equine or mixed animal practice.

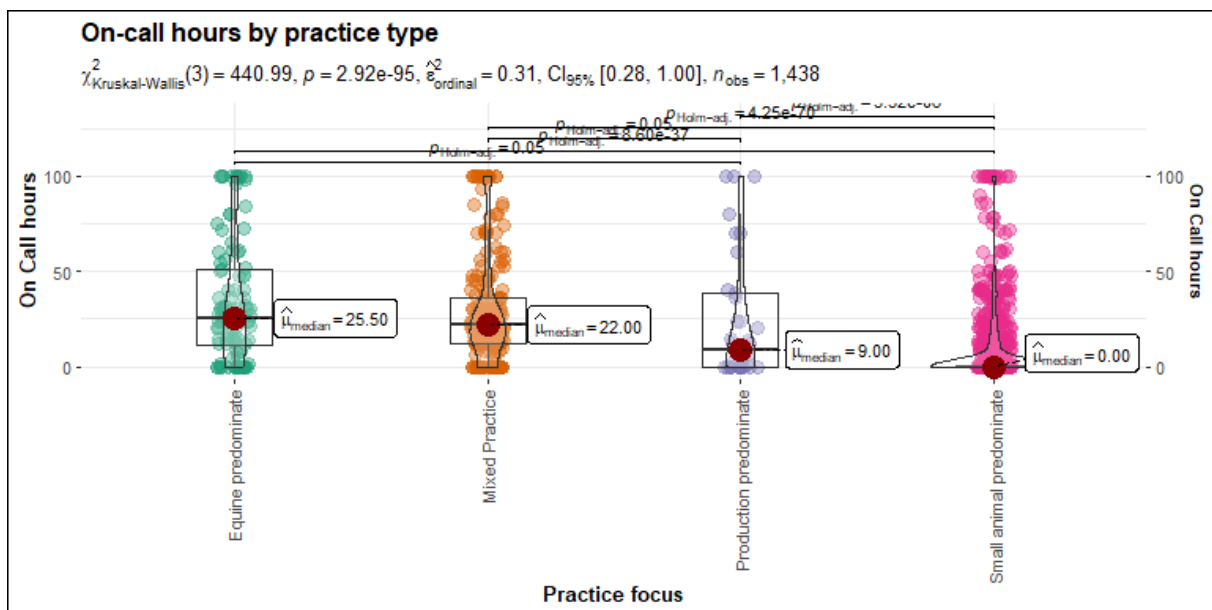


Figure 24 - On-call hours by practice type (n=1438)

Table 12 On-call hours by practice type

Practice Focus	Lower	Median	Upper	Range	IQR	n
Equine predominate	0.00	25.50	100.00	100.00	40.00	104
Mixed Practice	0.00	22.00	100.00	100.00	24.00	225
Production predominate	0.00	9.00	100.00	100.00	38.25	34
Small animal predominate	0.00	0.00	100.00	100.00	0.00	1075
NA	0.00	0.00	84.00	84.00	4.00	25

Hours called back

Equine and mixed practice had the highest median call back hours at 5 hours per week each. The median for production practice was 1 hour and nil for small animal.

Table 13 Hours called back by practice type

Practice Focus	Lower	Median	Upper	Range	IQR	n
Equine predominate	0.00	5.00	100.00	100.00	8.00	100
Mixed Practice	0.00	5.00	51.00	51.00	6.00	222
Production predominate	0.00	1.00	15.00	15.00	4.75	34
Small animal predominate	0.00	0.00	36.00	36.00	0.00	1039
NA	0.00	0.00	15.00	15.00	0.75	22

Part time work

Of respondents in the workforce, 30.5% reported working part-time. The predominant reasons for this were family care (27.8%), personal preference (23.6%), and being retired or semi-retired (16.4%).

Hourly rate

A number of respondents indicated the upper bound, (\$500/hr) which suggests that the upper bound for the question would have benefited from being set higher.

Hourly rate by age and gender

Table 14 Effective hourly rate by age and gender

Gender	Lower	Median	Upper	Range	IQR	n
Woman or Female	0.00	56.00	500.00	500.00	25.00	1263
Man or Male	0.00	70.50	500.00	500.00	43.25	524
Age	Lower	Median	Upper	Range	IQR	n
20-24 years	0.00	38.00	43.00	43.00	10.00	13
25-29 years	0.00	43.00	224.00	224.00	15.50	227
30-34 years	0.00	52.50	273.00	273.00	25.00	256
35-39 years	0.00	60.00	500.00	500.00	21.75	238
40-44 years	0.00	63.50	295.00	295.00	23.75	210
45-49 years	0.00	62.00	240.00	240.00	25.00	196
50-54 years	0.00	67.00	500.00	500.00	28.00	191
55-59 years	0.00	64.00	500.00	500.00	29.00	164
60-64 years	0.00	71.50	500.00	500.00	32.50	150
65-69 years	0.00	74.00	312.00	312.00	47.50	87
70-74 years	4.00	72.50	301.00	297.00	71.75	34
75+ years	0.00	65.00	340.00	340.00	50.50	39
Prefer not to say	56.00	70.50	85.00	29.00	14.50	2

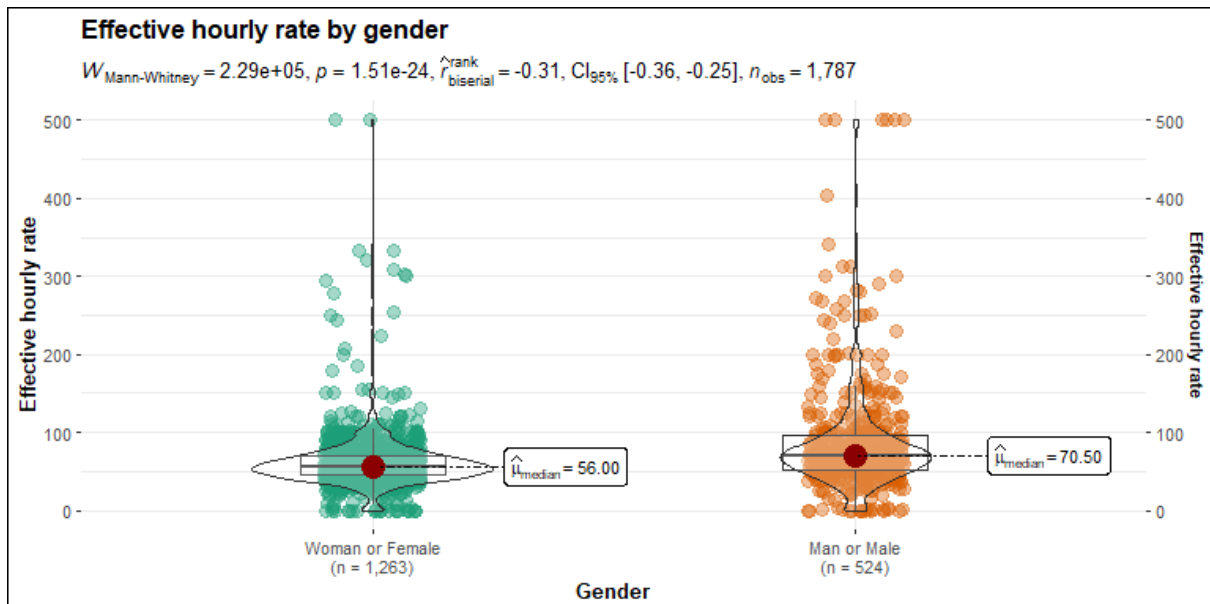


Figure 25 - Effective hourly rate by gender (n=1787)

When hourly rate were segregated into gender and 5 year age groupings the only groups where there was a significant different in hourly rate were in the age groups 45-54 years, 60-64 years, and 70+ years.

Hourly rate by location

Table 15 Effective hourly rate by location

State or Territory	Lower	Median	Upper	Range	IQR	n
ACT	0.00	65.00	404.00	404.00	36.00	41
NSW	0.00	62.00	500.00	500.00	33.00	429
NT	35.00	62.00	100.00	65.00	16.50	23
QLD	0.00	57.00	500.00	500.00	27.75	446
SA	0.00	56.00	244.00	244.00	25.00	132
TAS	0.00	60.00	295.00	295.00	45.50	47
VIC	0.00	60.00	500.00	500.00	28.00	535
WA	0.00	60.00	333.00	333.00	25.50	147
O/seas	43.00	55.00	70.00	27.00	13.50	3
NA	14.00	60.00	156.00	142.00	73.00	4
Location (home)	Lower	Median	Upper	Range	IQR	n
Metro	0.00	60.00	500.00	500.00	29.00	947
Regional	0.00	60.00	500.00	500.00	30.00	852
NA	14.00	83.50	156.00	142.00	47.50	8

Metropolitan practitioners effective hourly rate was significantly but only marginally higher than those located in regional practices ($p=0.02$).

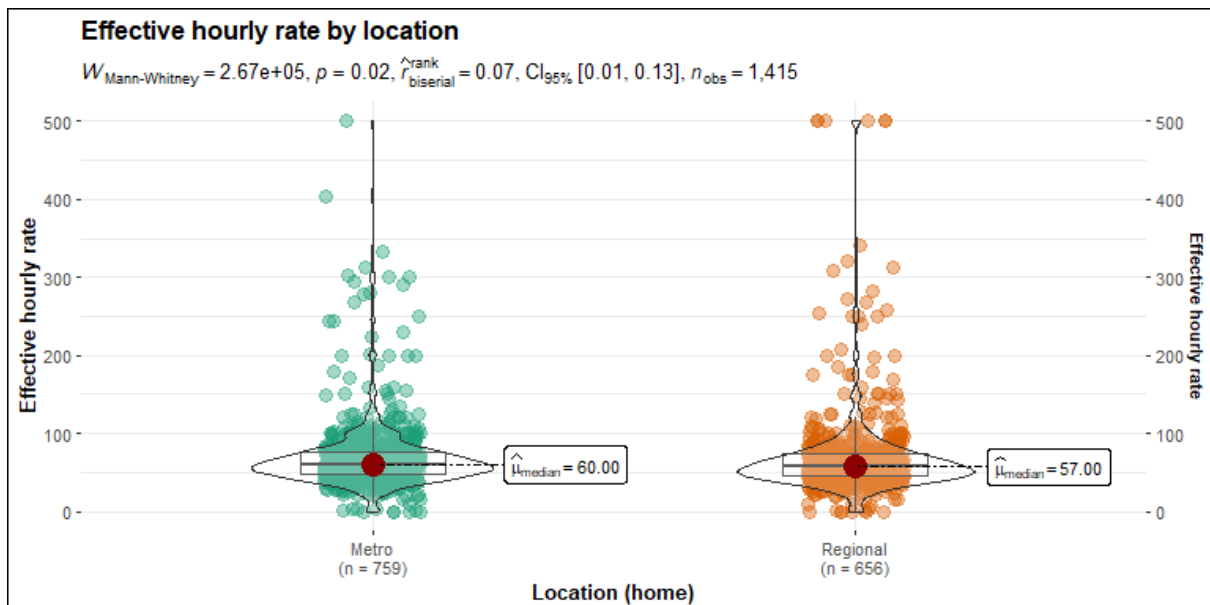


Figure 26 - Effective hourly rate by location ($n = 1415$)

Hourly rate by field of work, clinical practice focus and role.

Table 16 Hourly rate by field of work, clinical practice focus and role

Field of work	Lower	Median	Upper	Range	IQR	n
Academia/Tertiary/Research	0.00	63.50	333.00	333.00	38.75	70
Agriculture	0.00	58.50	156.00	156.00	62.00	22
Clinical veterinary practice	0.00	60.00	500.00	500.00	29.00	1421
Government	0.00	62.00	200.00	200.00	20.50	135
Industry	0.00	62.00	188.00	188.00	33.00	55
Laboratory	2.00	52.50	151.00	149.00	33.25	12
Other (please specify)	0.00	60.00	500.00	500.00	40.50	92
Practice Focus	Lower	Median	Upper	Range	IQR	n
Equine predominate	0.00	50.00	500.00	500.00	32.00	101
Mixed Practice	0.00	51.00	500.00	500.00	29.00	221
Production predominate	0.00	62.00	250.00	250.00	52.25	34
Small animal predominate	0.00	60.00	500.00	500.00	27.00	1040
NA	0.00	67.00	500.00	500.00	34.00	25
Role	Lower	Median	Upper	Range	IQR	n
Consultant	4.00	75.00	302.00	298.00	42.00	23
Employed veterinarian	0.00	55.00	500.00	500.00	23.00	893
Locum	0.00	80.00	120.00	120.00	25.00	77
Practice owner	0.00	66.00	500.00	500.00	50.00	393
Other (please specify)	9.00	65.00	500.00	491.00	30.75	36
NA	0.00	62.00	500.00	500.00	32.00	385

When the effective hourly rate was compared by practice focus small animal practices were found to have a significantly higher rate than mixed practice or equine practice, but was lower than production animals.

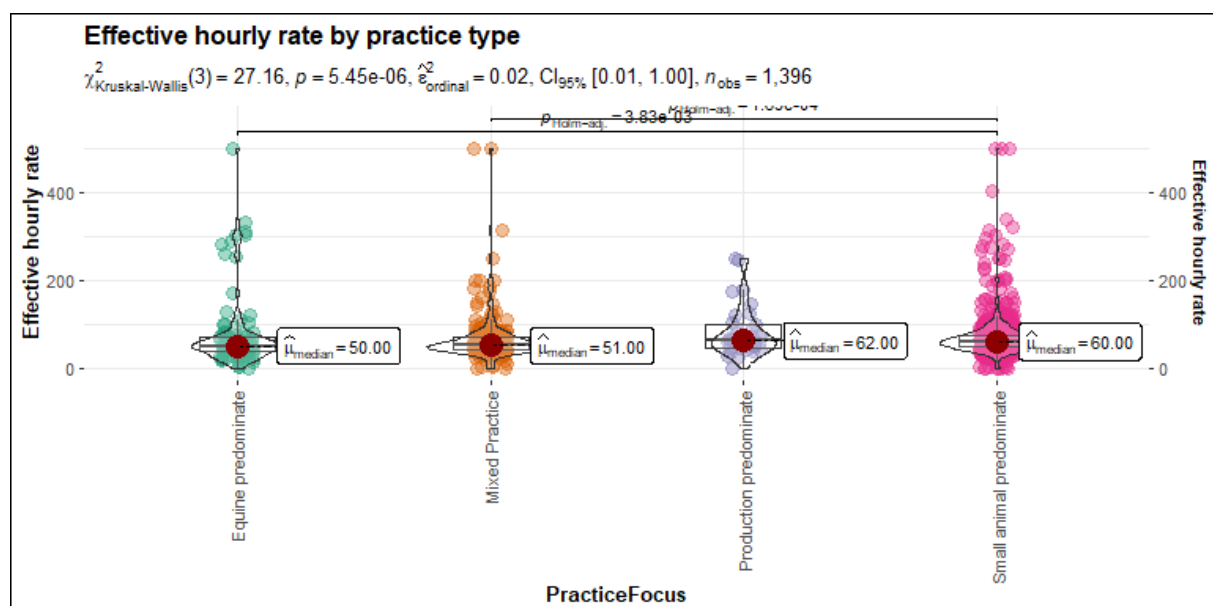


Figure 27 - Effective hourly rate by practice type (n=1396)

Reasons for not working

Predominant reasons for not working included studying (27%), retirement (23.8%) or working in non-veterinary related roles (22.7%).

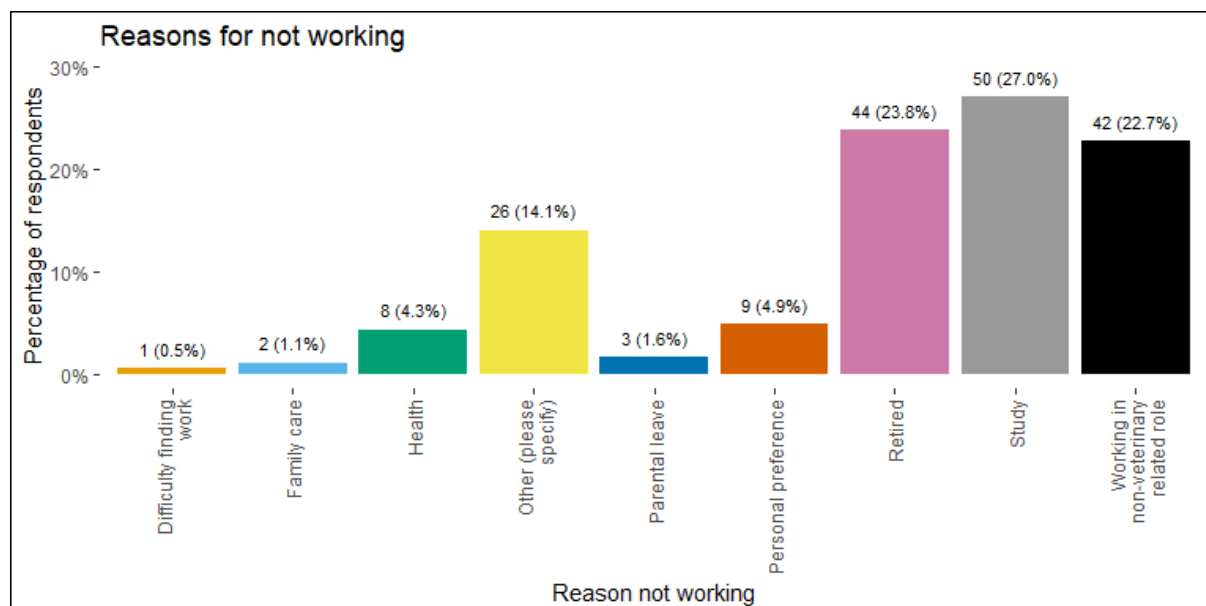


Figure 28 - Reasons for not working (n=185)

Retirement age

The average retirement age for women was 60 years, while it was 66 for men.

Table 17 Retirement age

by Gender

Gender	Lower	Average	Upper	Range	IQR	SD	n
Woman or Female	50	60	65	15	6	5	7
Man or Male	49	66	80	31	8	7	34

Discussion

Working hours

Working hours and gender is consistent with ABS Census data which shows that in 2021 average working hours for females with veterinary science qualifications was lower at 35.5 hours per week to males at 39.3 hours per week (Pratt 2023). Further, the average working hours match those found in the 2018 AVA Workforce Survey, which reported male average hours as 41 hours and female as 36 hours. That same survey found the median working hours to be 38 for female and 40 for male - the same as recorded in the 2023 survey. When compared to the 2013 AVA Workforce Survey we see male working hours falling from 43 hours in 2013. However, that same survey reported female average hours as 35. (AVA 2014a) This seems to support the conclusion from 2011 to 2021 ABS Census analysis which found male working hours falling over time, while female working hours are relatively stable (Pratt 2023).

Working hours and location

It is difficult to compare this with previous surveys as this was the first time this data has been reported in the AVA Workforce Survey.

Working hours and Practice Focus

Median working hours for equine predominant respondents (49 hr) was consistent with the results of the 'Workforce sustainability in equine veterinarians - perceptions of stayers and leavers' research which found the mean working hours was 45.8 hr (Bell et al 2021).

Limitations

The AVA 2023 Workforce survey was conducted as a population-wide survey rather than by random sampling to maximise the number of responses received. Significant efforts were made to make the survey known to and available to the widest possible number of veterinarians in Australia.

In considering the representativeness of the survey, data from the survey responses is compared to both state and territory details on the numbers of registered veterinarians and a more detailed consideration was given to the ages and gender of respondents in NSW. The latter was undertaken using NSW Veterinary Practitioner Board data in its 2023 Annual Report. Analysis suggests that 30-50 year old males and 20-40 year old females are slightly under represented in the survey, while 70+ males and 60-70 year old females are slightly over-represented.

Other areas of potential bias are more difficult to assess, predominately, these could be in field of work and in role. In comparing broad areas of work with those obtained in the 2021 ABS Census (Pratt, 2023), it appears that, veterinarians not in the labour force at all are largely absent. When veterinarians in the labour force are considered, the survey responses over-represent clinical practitioners, Government vets and Industry and lab vets, while education and research, Agriculture and other are underrepresented.

Weighting of responses was not undertaken and the reader is advised to consider potential areas of bias discussed.

Acknowledgements

The AVA would like to thank the veterinarians who responded to the workforce survey and contributed their data. The AVA would also like to thank the state and territory veterinary registration boards, university veterinary schools, Australian Chief Veterinary Officer, state and territory CVOs, and others who assisted in the promotion of the survey.

This is the first year the AVA Workforce Survey has been conducted with ethics approval. The AVA appreciates the contribution of Dr Laura Hardefeldt, who was the project supervisor and assisted with ethics advice.

The AVA is grateful to Australian Rainbow Vets and Allies for their assistance in forming the questions and glossary to further the understanding of the demographics and diversity of the profession.

Further information

For further information, please contact:

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