

DESTINATION THRIVING

A roadmap for the Australian veterinarian workforce



Destination Thriving: A roadmap for the Australian veterinary workforce

An AVA whitepaper on the veterinary workforce

Contents

Purpose Statement	3
Veterinary Workforce - Context	4
Background	6
SECTION 1	7
Why is there inadequate capacity to deliver veterinary knowledge and services to meet community demand?	7
1.1 Veterinary markets	7
Demand for veterinary services	7
Supply of veterinary services	9
1.2 Causes of workforce shortage	.10
Private sector veterinary profession's business model vulnerability	
Generational and societal change	.15
SECTION 2	
How can capacity to deliver veterinary knowledge and services to meet community demand be increased?	
2.1 External support the profession needs	.17
Mechanisms to recoup the costs of delivery of public good incorporated into the veterinary	•
Recognition that the veterinary profession is essential for standards required, not optiona and regulatory support for the role of the veterinary team	,
2.2 Steps the profession needs to take	.20
Continue to build on mechanisms to promote sustainable employability and satisfaction o veterinary careers	
Increased collaboration with other sectors to advance animal health and welfare	.20
2.3 Workforce data collection	.21
SECTION 3	.22
Conclusion	.22
References	.23





VETERINARY IMPACT

Pet care expenditure⁵



\$33.2bn

Dogs **\$20.5bn** 🕃 Cats **\$9.1bn**



Revenue of Australian Veterinary industry³

\$5.6bn

Veterinary Businesses (Practices) in Australia¹

3,651

The Veterinary sector employs:

29,008 people⁴ 15,816 vets

with total wages \$2bn6

Livestock disposals and livestock products¹¹

\$32.2bn

\$13.9bn (43.2%) for cattle and calves

\$4.1bn (12.7%) for sheep and lambs

\$3.6bn (11.2%) for poultry

\$1.5bn (4.7%) for pigs

\$3.0bn (9.3%) for wool

\$6.1bn (18.9%) for milk

The gross value of fisheries and aquaculture 22





1, 2, 3, 4, 6, 12, 13 IBISWorld 2024

5 Animal Medicines Australia 2022

11 Australian Bureau of Statistics 2022-2023

The gross revenue of racing (horse and greyhound)¹³

\$4.6bn





Purpose Statement

Project Introduction

Destination Thriving: A Roadmap for the Australian Veterinary Workforce is a white paper developed by the Australian Veterinary Association (AVA) in response to the ongoing and worsening shortage of veterinary professionals across Australia. Now in its eighth year, the shortage is having significant impacts on animal health, public welfare, veterinary wellbeing, and the sustainability of veterinary services — particularly in regional and rural communities.

Description

This paper provides a comprehensive analysis of the factors driving the workforce shortage, with particular focus on the vulnerability of the veterinary business model, societal and generational shifts, and the misalignment between public good expectations and private funding structures. It draws on evidence from national surveys, economic studies, parliamentary inquiries, international research, and workforce data to make a clear case for coordinated reform.

Purpose

The purpose of this paper is to outline the root causes of the veterinary workforce crisis and provide a practical, research-informed roadmap to help the profession meet future community demand. It seeks to influence policy, regulation, funding models, and professional practice by identifying points of intervention and setting out both external supports and internal steps needed to achieve long-term workforce sustainability.

Intended Audience

This white paper is intended for government policymakers (federal and state), veterinary regulators, industry stakeholders, educators, and animal health and welfare sector partners. It also serves as a resource for veterinarians and veterinary businesses looking to understand and respond to the broader structural challenges facing the profession.

Key Paper Highlights

- Outlines the economic, social, and public good value of veterinary services to Australia
- Examines the structural vulnerabilities of the veterinary business model
- Highlights mental health, workplace, and remuneration challenges impacting retention
- Recommends regulatory, funding, and education reforms
- Calls for greater government investment, particularly in rural and public-good veterinary services
- Emphasises the need for coordinated data-driven workforce planning through national collaboration
- Advocates for expanding and regulating the roles of the broader veterinary team, including veterinary nurses and technologists.



Veterinary Workforce - Context

Role of the veterinary profession

Veterinary services help secure Australia's animal health and livestock supply chain, protecting hundreds of thousands of jobs nationwide and easing cost of living pressures through a safe and reliable food supply.

Veterinarians play a vital role in supporting animals and their owners, strengthening the human-animal bond and enhancing the associated health and wellbeing benefits for people. Australia's veterinarians are highly regarded, trusted community members. Their expertise and dedication are essential to the health and welfare of our animals. The Governance Institute of Australia 2023 survey puts veterinarians in the top 10 ethical occupations, designating the occupation as very ethical (Governance Institute, 2023).

Animals are not just a part of the Australian way of life; they are deeply embedded in it. Animals and their associated industries contribute significantly to society's social, cultural, environmental, and economic fabric.

The community regards veterinary services as essential, like human health care and education. The availability of veterinary services underpins the social licence by which animal industries operate. People responsible for animal health and welfare must have confidence that animal health care will be available when they need it. Similarly to human health, the community expects the veterinary profession to not only provide services for private (individual) benefit, but to also deliver services that provide public benefit (public good).

Economic value of Australia's animal industries

The value of animals to the Australian economy should not be understated. In 2022, pet related expenditure was \$33 billion (AMA, 2022). In 2023, revenue generated by livestock industries was \$60.2 billion, and revenue generated by Australia's racing industries was \$11.2 billion (IBIS World, 2023). All the animals and uses captured in these economic figures need some level of veterinary care and veterinary oversight.

Pet ownership in Australia

Sixty-nine percent (69%) of Australian households have a pet (AMA, 2022), which equates to 6.4 million households, and over 16.5 million people living with their pets. As 90% of pet owners report that pets have a positive impact on their lives, and over 60% of them refer to their pet as a member of the family, the human-animal bond provides a myriad of benefits, and directly and indirectly improves the health and wellbeing of the community (AMA, 2019).

Access to, and regulation of, veterinary services

When veterinary services are unable to be accessed, there is the risk of animal health being compromised, leading to poor welfare outcomes, increased biosecurity risks and impacts on animal and human health, welfare and wellbeing.

The regulated role of the veterinary profession is to safeguard animal health and welfare and public health through a set of standards and professional conduct across all animals and veterinary disciplines. This requires a framework of regulation, education, infrastructure and workforce.

Providing veterinary services to animals in need is required by legislation, creating an expectation and reputation of standards by the community and markets. Modern animal welfare legislation protects the intrinsic value of animals themselves and the security and value of the benefits the



community receives from healthy animals. For this to occur, there needs to be access to veterinary services and standards. Animal welfare standards are critical for the continuation of animal interaction, ownership and animal industries. This is known as social licence.

There are direct benefits to animal health and welfare and human health, as well as to the community, when standards are met by maintaining Australia's favourable international reputation for animal welfare, biosecurity and 'clean' agricultural produce.

The Australian veterinary landscape

Regardless of animal ownership, the veterinary profession impacts and protects all the community.

In 2024 it was reported there were 3,651 veterinary businesses nationally, and in 2025, 20.8% of the market will be controlled by 4 corporate companies. Additionally, there are several other small corporate entities within the sector (IBIS World, 2024).

The veterinary profession provides veterinary care to a large variety of animal species. Unlike the human health sector that is a combination of the public and private sectors, most of the veterinary profession sits within the private sector, with over 80% of the profession working within small to medium businesses and 5% employed in public service.

Nationally, there were 14,352 registered veterinarians in 2023. These veterinarians lead veterinary teams who provide veterinary services to over 28.7 million pets (AMA, 2022), in addition to Australia's iconic wildlife species, and animals within racing, livestock and production industries.

Veterinary workforce shortage

Workforce shortages are currently affecting the veterinary profession, with the profession in its eighth year of shortage (Jobs and Skills Australia reconfirmed the shortage in 2024). This is particularly so in rural and regional areas, where shortages have been persistent in the long term.

Veterinarians are an essential community service, along with health, childcare, and education. Given Australians' love of their pets, if towns and regional areas don't have access to adequate veterinary services, it is harder for all employers to attract and maintain a workforce.

Advocating for a Robust Veterinary Workforce is one of the key advocacy focus areas of the AVA. The discussions in this paper have underpinned the AVA's advocacy activity in recent years. It has been informed by the work and analysis of the AVA Public Affairs and Advocacy Team

About the AVA

The Australian Veterinary Association (AVA) is the peak body representing the veterinary profession in Australia. The AVA has provided a united voice for the veterinary profession for over 100 years and is committed to championing and empowering the veterinary profession to thrive. With members involved in all aspects of the veterinary industry, the AVA plays a crucial role in representing their interests. The AVA actively promotes public awareness and education about the veterinary profession and animal health and welfare. The AVA has a Division in each State and Territory in Australia, representing the Association to State and Local Governments, veterinary registration boards and other committees. Additionally, the 19 Special Interest Groups (SIGs) within the AVA represent different species and areas of practice.



Background

Advocating for a Robust Veterinary Workforce is an AVA key advocacy focus area.

The discussions in this paper have underpinned the AVA's advocacy activity in recent years. It has been informed by the work and analysis of the AVA Public Affairs and Advocacy Team.

In 2021, the AVA responded to member feedback on the need for increased advocacy for the veterinary profession, establishing the THRIVE initiative and forming a new advocacy strategy and team. Since that time, there has been an increase in public, parliamentary, and government awareness of the essential nature of the veterinary workforce and the shortage of this workforce.

In 2022, the AVA worked with economics experts Marsden Jacobs and Associates looking at *'The value of the veterinary profession to Australia'*, and in 2023 the AVA's National Manager – Advocacy, completed an Economics Masters Dissertation into the Australian Veterinary Workforce.

In 2023, influenced by the AVA advocacy activities, the NSW Parliament initiated a Parliamentary Inquiry into the veterinary workforce shortage and in late 2024 the South Australian Parliament also established their own similar Inquiry. This white paper draws upon the work done in the AVA submission to the NSW Veterinary Workforce Shortage Inquiry and will inform the future contribution to the SA Inquiry, and future advocacy across Australia's jurisdictions.

In 2023 and 2024, advocacy on workforce issues continued. The AVA worked with Dr Kristen Steele on a survey for her PhD research into the public good that veterinarians provide. Once analysed, the survey data from this PhD should provide valuable additional information on the breadth and financial scope of unpaid veterinary work.

In 2024, the AVA supported Dr Bronwyn Orr in her Churchill Fellowship. The report showcases international approaches to veterinary workforce shortages which could be considered for application in the Australian context.

In 2024, the Australian Office of the Chief Veterinary Officer (OCVO) held a roundtable on veterinary workforce issue that led to the establishment on a Taskforce to work on the matter, as the lack of consistent workforce data is regularly identified as a barrier to evidence-based policy interventions.

In 2024, the AVA launched its Federal Election Priorities for 2025, listing investments and interventions for a 'Robust Workforce' as its number one election priority.

In 2025, a Jobs and Skills Australia report (January 2025) recognised the critical role of veterinarians in Australia's food supply chain.

In 2025, the AVA looks forward to participating in the 'Veterinary Workforce Data Taskforce', supported by the OCVO, with the aim on identifying long-term workforce data solutions for the profession.

In 2025, this AVA whitepaper rests on a growing body of research from across the globe on veterinary workforce challenges and discussion amongst key organisations in our sector.



SECTION 1

Why is there inadequate capacity to deliver veterinary knowledge and services to meet community demand?

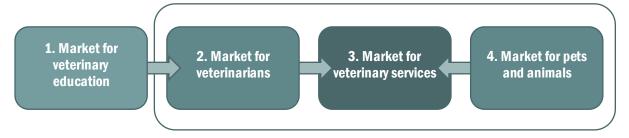
Veterinary services are different to many other goods and services in the economy as they deal with the health and welfare of animals.

The application of an increasingly purely private market framework to the delivery of these services over the past several decades has meant that there is an under-delivery of the veterinary services that provide public benefit. It has also left the veterinary business model financially vulnerable, further putting at risk the public benefit that has been provided.

1.1 Veterinary markets

There are reported to be 4 distinct but interrelated veterinary markets (Neill, 2022). Three of these markets interconnect to form the market for veterinary services.

Figure 1 - Interconnected markets that form the market for veterinary services



In the 'veterinary services' market, the basis of supply is the labour supply, that is the number of hours that veterinarians are prepared to work at a particular hourly rate. The basis of demand is the market for animals, that is the cost of purchase and ownership.

The equilibrium point is the trade off in the willingness to supply services at a given price, and the willingness of owners to pay for those services at that price (Neill, 2022).

Demand for veterinary services

The market for animals varies between sectors, and as a consequence so does the demand for veterinary services.

Veterinary services for companion animals

Key drivers that impact demand for companion animals (that is, ownership of individual animals where there is a substantial emotional connection with that individual animal) are the cost of purchase and the cost associated with the care of that individual animal. The strong connection between people and their pets and the desire to provide a duty of care for those pets is a foundation of companion animal veterinary practice. The demand for veterinary services in the companion animal sector is very high, driven by the large numbers of companion animals owned, the changing landscape and increasing complexity of veterinary care, high community



expectations, and low tolerance for risk in the care of individual companion animals. However, there is a ceiling as to the price owners are willing to pay for veterinary services.

Veterinary services for livestock

In the livestock sector, advances in animal agricultural systems coupled with societal and market influences have decreased the value of the individual animal, increased the value of farming enterprises, and decreased labour used per animal.

As animal production business models evolved and profit margins were increasingly influenced by many factors outside a producer's control, combined with the production sector veterinary services market becoming a "user pays" system, veterinary care became considered an optional cost that needed to demonstrate a return on investment. Although not necessarily financial, this has been challenging for the veterinary profession to demonstrate (Secombe, 2024).

Consequently, there has been a long-term decline in the demand for veterinary services in the production animal sector. This is likely attributed to several factors, including challenges around widespread adoption of preventive veterinary services, improved self-efficacy of producers through advancement of knowledge, and concern by producers over the role of veterinarians in production animal systems (Secombe, 2024).

Long term decline in demand for veterinary services has resulted in an erosion of the veterinary services that animal production systems utilise to below a threshold level. Although most producers continue to have a demand for veterinarians to be available for reactive services for individual animals, the maintenance of this expertise to deliver production animal veterinary services and to serve industry on an as required reactive basis has not been sustainable. Veterinary businesses have had to adapt to remain viable, which in many cases has involved shifting to a companion animal focus.

Veterinary services that deliver essential public good

Superimposed on these private market factors is the provision of veterinary services that deliver essential public good. Frawley (2003) discussed this with respect to production animal veterinary services and more recently Dr Kristen Steele has applied the concept of public good to the delivery of companion animal and wildlife veterinary services.

While research is continuing in this space, there are clear areas where veterinarians provide public benefit and absorb those costs into their private businesses.

The AVA engaged Marsden Jacob Associates (MJA), advisors in economics, public policy, markets and strategy who produced "The value of veterinarians to Australia: Public and private benefits".

The <u>report</u> explored several key areas:

- 1. Where the delivery of private veterinary services is adequately recouped through private fees.
- 2. Where services (public benefits) are needed to be provided to the public despite being underfunded, to meet the level of care expected by the community and required by the state, e.g. where veterinarians are required by legislation to provide a level of service to an animal regardless of the owner's ability to pay (or whether there is an identifiable owner at all).
- 3. When private services create positive spillovers (externalities) which benefit the community but are unable to recompensed, e.g. where there are additional benefits to the community in the delivery of a private service passive biosecurity surveillance or herd immunity effects that owners of unvaccinated animals obtain because of vaccinations paid for by other animal owners.



Points 2 and 3 highlight situations where veterinarians are not compensated for the public benefits delivered.

Other examples include 24/7 availability of veterinary care, disease surveillance to maintain biosecurity, safe food production, animal population control, pro bono and heavily subsidised veterinary services for vulnerable people who own animals, wildlife and stray animals and veterinary care to animals affected by disasters.

The willingness of the individual animal owner to pay for veterinary services that deliver public good is limited, and in many cases the profession bears the cost of delivery of these services. The other impact of there being no compensation for these services is that the overall level of veterinary services provided to the community will be lower than is economically optimal.

Supply of veterinary services

As most veterinary services are provided by the private sector, the supply of services is dependent on a functional veterinary business model that is able to operate within the private market. Like all businesses, service delivery incurs fixed and variable costs, as well as labour costs. For a business to be sustainable in the private market, a return on investment is required.

The challenge in the Australian veterinary context is that, irrespective of expectations, there is a threshold that owners are willing to pay for veterinary services which often does not reflect the cost of delivery of the care. Complicating this is the Australian experience of a heavily funded human public health system, which distorts the community's understanding of the true cost of delivery of human health care, and in turn, distorts community expectations of the true cost of veterinary health care.

There is little flexibility in the fixed and variable costs associated with delivery of veterinary services, however, there has been flexibility in the labour component. The supply of veterinary services relies heavily on the supply and demand of the labour market for veterinarians to undertake the work.

The supply component of the labour market is influenced by the number of graduates produced each year. Australia is recognised as graduating a very high number of veterinarians every year (approximately 750). This is one of the highest rates per capita in the world.

Supply is also influenced by remuneration. There is an equilibrium point in the labour market that is determined by the average wage per hour veterinarians are willing to work and the numbers of hours they are willing to work (Neill, 2022).

A workforce shortage is recognised when there is not a sufficient labour supply to deliver the required supply of veterinary services.



1.2 Causes of workforce shortage

Although the drivers of demand for veterinary services vary between differing sectors, the underlying cause of the workforce shortages can be broadly categorised into those:

- 1. Driven by the private sector veterinary profession's business model vulnerability,
- 2. Due to generational and societal change.

Private sector veterinary profession's business model vulnerability

In the pursuit of maintaining equilibrium between the delivery of veterinary services that serve both the private and public good, and willingness of individual consumers to pay, the vulnerabilities of the veterinary business model have been exposed. This has led to an underinvestment in the labour component required to maintain veterinary business viability.

The long-term consequence of this has been a reduction in labour supply. This has, in turn, resulted in inadequate capacity to deliver veterinary knowledge and services to meet community demand (figure 2).

Figure 2 – Pathway to a reduction in veterinary knowledge and services to meet community demand

Vulnerability of the veterinary business model • Cost of 21st century

- veterinary care
- Inability to recoup the full value of services that are for the public
- Regulatory requirements to maintain standards and legislative shift

Under investment in the labour component of the profession

- Low wage growth
- Lack of flexibility in working conditions
- Long hours
- Reduced career development opportunities

Reduced workforce participation by veterinarians (attrition, reduced hours)

- Unsustainable and unsatisfying working conditions
- High educational debt in the face of low
- Mental health issues

Inadequate capacity to deliver veterinary knowledge and services to meet community demands

- Animal health compromised
- Poorer animal welfare
- Increased biosecurity and food security risk particularly around surveillance

This white paper will now examine details related to each component.

Vulnerability of the veterinary business model:

The cost of delivery of 21st century veterinary care – Increases in the cost of delivery of veterinary care has paralleled that of human health care. This cost covers all aspects of the model: infrastructure, equipment, disposables, therapeutics, labour component per-patient for individual patient care, accessibility of 24/7 services, and maintenance of expertise and skills. The cost of delivery of this care is very expensive but, unlike human health care, the private veterinary



profession does not receive formal public funding, and all costs must be passed on directly to the consumer.

The inability to recoup full value of services that are performed for the public good – Veterinary services are almost entirely privately delivered. While government employed vets work in export abattoirs and local land services (biosecurity roles), the government provides minimal public funding to other veterinary services or support of charities. Some of the public good provided by the private veterinary profession is mandated by legislation and vet board policies, while other public good services are in response to broader community expectation. Some private veterinary services performed also create positive spillovers (externalities) which benefit the community but are unable to be recompensed - examples include desexing of animals at a discounted rate to assist with animal population control, and passive biosecurity surveillance with veterinarians on farms. Society benefits positively from the provision of these services, but they are frequently provided without funding and at the expense of veterinary businesses and veterinarians.

Unfortunately, after decades of public benefit provision by the private veterinary sector without adequate ability to recoup the costs, the consequence of this vulnerability of the veterinary business model is erosion of the sustainability of the veterinary profession and, by extension, the public benefit that it provides for the community.

Regulatory requirements to maintain standards and legislative shift – The provision of veterinary care must be regulated to protect animals and the community. Despite the sentience of animals there are species differences within legislation and regulations on the requirement for veterinary care, and who can deliver this care. This results in the veterinary profession and the provision of veterinary services to animals being treated as optional rather than essential.

Community expectation dictates that provision of veterinary care is essential for appropriate animal health and welfare standards to be met. In animal-related industries this is referred to as a social licence to operate. The acceptance and approval of animal industries by the community is contingent on the premise that animal health and welfare is maintained to appropriate standards. Despite optional use of the veterinary profession, many animal industries leverage the veterinary profession to maintain and enhance their social licence. These industries recognise the community value and importance of the profession in animal health and welfare through its provision of veterinary care, animal welfare advocacy, compliance and regulatory roles, research and innovation, and education and outreach.

Regulation is a balancing act; restrictive, overly prescriptive regulation causes an excessive administrative burden to the veterinary business model. Legislative shifts to allow veterinary services to be delivered by those other than regulated veterinary team members creates additional vulnerability in the veterinary business model, along with animal health and welfare concerns. Furthermore, there are several aspects of veterinary legislation that place public good obligations on the veterinary profession with no method for the profession to recoup the costs of meeting the obligation.

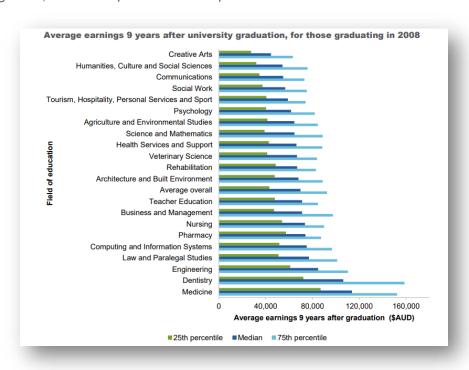


Under investment in the labour component of the profession

Vulnerability of the veterinary business model has resulted in **under investment in the labour component of the profession** which is evidenced by:

Low wage growth - The earnings of a veterinarian 9-years post-graduation is less than the average across a range of other fields. The return on investment of veterinary education is poor compared to other sectors. In addition, the average earnings of Australian veterinarians appear to be falling behind those of other professions.

Figure 3 - from the Productivity Commission's 5-year Productivity Inquiry: From learning to growth, Interim report no. 5 – September 2022



More broadly, AVA Workforce survey data (AVA, 2021) indicates that although the proportion of veterinarians in clinical practice earning over \$80,000 per annum has increased from 42% in 2013 to 53% in 2021, when adjusted for inflation, this is a deterioration in real wages for veterinarians.

Low wages are also reflected in the remuneration: educational debt ratio - following 5 to 10 years of study and graduating with a debt of \$70-80,000 for a commonwealth funded student, and up to \$300,000 debt for a full fee paying student (domestic or international), QILT data (QILT, 2022) shows veterinary graduates commence on low salaries that have barely kept up with inflation in recent years. Compared with other undergraduates who have undertaken a similar level of education, veterinarians are well behind. This leads many to choose to utilise their educational skill set for more lucrative careers.



Figure 4 - Veterinarian graduate starting salaries {Quality Indicators for Learning and Teaching, 2022, #57418}



Long hours and after hours – While average working hours have been trending downwards, long working hours are still a significant characteristic of the veterinary profession with approximately 40% of women and 60% of men working 40 hours or more a week (Pratt, 2023). Further, when looking at the veterinarian occupation recorded in the 2021 Census, almost 20% are working more than 50 hours a week and almost 10% in excess of 60 hours. It is likely that these people are working with large animals, as on average, these veterinarians work 10 hours/week greater than the overall profession (Bell et al., 2021).

Regulatory requirements mandate that veterinary businesses have a provision to deliver veterinary care outside business hours. The methods the profession has of managing this vary depending on the species serviced and geographic location. In the case of urban companion animal practice, large emergency centres that service the community outside business hours are common, rather than individual practices providing these services. Generally, in large animal practice and in rural areas, veterinary practices provide an "on call" service for management of ongoing care of animals and emergency animal care. This is usually managed by the same team that work during the day and is an additional workload for veterinarians and their teams.

The accepted model for managing the provision of afterhours has not been sustainable for veterinary teams, whether that be in urban areas with emergency centres or for those veterinary businesses using the "on call model". Delivery of afterhours veterinary services has been raised as a factor that contributes to poor veterinary mental health, particularly the requirement to be available 24/7 with no ability to rest and protect wellbeing (AVA, 2021b). Furthermore, the requirement to participate in afterhours rosters without adequate time off and remuneration is a factor that impacts recruitment and retention.

Lack of flexibility in working conditions – The veterinary profession has traditionally been a full-time undertaking, and even now the part-time participation rate of the veterinary workforce is slightly less than the general Australian work force (AVA, 2024; ABS, 2024). Increased flexibility requires additional resourcing to achieve, and it has not been prioritised in the existing veterinary practice business model. The lack of flexibility in working conditions is also a significant deterrent for parents to come back to work after parental leave. The significant costs of childcare compared with the proportionally lower pay of veterinarians means many decide working as a veterinarian while raising young children is not financially viable.



Challenges in re-engaging with the workforce or re-training – Due to the constantly evolving and changing nature of veterinary medicine, veterinarians who spend time away from clinical practice for any reason can face challenges with re-entering the profession. This is also true of veterinarians who wish to practice in a field they do not have recent experience in (e.g. switching from livestock practice to companion animal practice). This hampers flexibility in re-joining the workforce.

Challenges around workplace safety – Physical work-related injuries and zoonoses in the veterinary profession occur frequently as a consequence of working with animals (Epp and Waldner, 2012; Jeyaretnam and Jones, 2000). Veterinarians are often required to work in isolation, both in and after business hours, which can place personal health and safety at risk. Having another team member accompany a solo veterinary practitioner to attend an afterhours call is usually not financially viable or available. The challenges around workplace safety can contribute to an individual's decision to leave the profession.

The lack of a career pathway - The veterinary degree provides a broad range of career opportunities; however, compared to other professions these have not been articulated through structured and funded pathways to more specialised disciplines. Furthermore, the changing demographics of the veterinary profession has meant that historical mechanisms to achieve career progression may now be barriers for early to mid-career veterinarians. There is evidence in some sectors that the lack of understanding in individuals of how to progress their career, and the costs associated with this, is a key factor involved in attrition.

Reduced workforce participation by veterinarians

Underinvestment in the labour component has led to less hours being available to deliver veterinary services and knowledge. Practically, this manifests as either **less veterinarians being available, or if present, reducing their availability.** The reasons for reduced availability include:

At an individual level the work may be satisfying but it may not be sustainable leading to attrition. Although most veterinarians (73%) find their work satisfying, around a third of the profession has concerns the work is not sustainable as they are unable to make a valuable contribution while safeguarding their own health and welfare (Bell et al., 2021; AVA, 2021). There is also some evidence that attrition is higher in early career (Bell et al., 2021). Factors that contribute to lack of sustainability include excessive workload and long hours, poor wellbeing, workplace incivility, poor health (including burnout), and poor financial returns.

Aspects of the veterinary job that are likely to have the most influence on determining if a veterinarian stays or leaves the profession are working conditions and culture, extrinsic rewards (salary/benefits), and flexibility to balance other demands in their lives (AVA, 2021b). In many sectors of the profession, the current model does not accommodate many of the attributes that a veterinary worker needs to make their job satisfying and sustainable. The workforce shortage has exacerbated these issues.

Mental health challenges within the veterinary profession greater than the general population. Burnout has been well recognised in the profession for some time (Kipperman et al., 2017; Hatch et al., 2011; Moore et al., 2014; Arbe Montoya et al, 2021) and the cost to the profession is estimated to be 2.01% of its value due to poor retention and reduced working hours (Neill et al., 2022b). Research undertaken by the AVA (AVA, 2021b) found over half (66.7%) of people



said they had experienced a mental health condition at some stage, and 54% of factors contributing to mental health issues were work-related (include work-related trauma, client interactions, workload, afterhours).

Generational and societal change

Generally, changes in societal expectations of veterinary care have mirrored those of human health care. The evolution of veterinary services has resulted in improved animal health and welfare outcomes, however, there is a much greater complexity associated with the supply of services, which also results in an increased cost of delivery. The Australian community has limited understanding of the costs of delivery of human health care due to the nature of the publicly funded human health system, leading to a disconnect between the veterinary services they expect and the cost to deliver these services. For example, changed societal expectations of after-hours care, particularly of small animals, can rarely be provided by a general practice. The community as a generality does not tolerate unsupervised overnight care of hospitalised patients. The cost of delivering 24-hour veterinary care is very high and is operationally impossible for many small veterinary practices.

The demands of the community have also changed due to increased perceived self-efficacy. This has occurred due to increased access to digital technologies and is likely to further increase with the uptake of Al technologies. Unfortunately, when this is accompanied by ineffective attempts at self-treatment and client incivility, it can cause moral stress for the treating veterinarian and their team. This can have a profound negative impact on the mental health of veterinarians and their retention, particularly early career veterinarians.

There have also been generational and societal changes around workforce participation. In the last 20 years the hours veterinarians work has evolved to reflect that of greater society, with the average work week of the profession reducing to 35.5 hours/week (Pratt, 2023; AVA, 2024), reflecting an increased desire for improved work life balance within the profession. However, workforce data shows that 30% of the workforce continue to work more than 50 hours a week (Pratt, 2023). Recent veterinary workforce data suggests that 25% of veterinarians work parttime, and that is less than 30 hours/week (AVA, 2021). This is slightly less than the general population where part-time share of work is 29.9% (ABS, 2024). Within the general population the part-time participation rate for males is increasing and is likely to continue to increase. The propensity for part-time participation of males increased three-fold (Gustafsson, 2021) between the 1950's and early 2000's, a trend that has also been observed in the veterinary profession. Within the general female population there has been a long-term increase in both full-time and part-time participation rates, with the increase in full-time participation being greater, and the expectation is that participation rates at the later ages of this stage of life will continue to increase for some time (Gustafsson, 2021). Overall, during the 21st century, the number of hours each individual veterinarian is prepared to work has reduced when compared to generations prior, irrespective of gender.

The profession is currently not meeting the generational change of expectations of early career veterinarians. Mid to late career veterinarians, irrespective of decade of birth, are often of the opinion that the veterinary education system is incorrectly selecting students, or not adequately preparing them, for the profession, as they are perceived to lack resilience. Early career veterinarians and veterinary educators often comment that the profession does not adapt to the changing expectations of incoming generations. The lack of ability in the profession to adapt is further complicated by underinvestment in the labour component of the profession and has led to high attrition rates in early career.



SECTION 2

How can capacity to deliver veterinary knowledge and services to meet community demand be increased?

To achieve the welfare objective that any animal under human care in Australia should be able to access veterinary care, strategies are required to improve the sustainability of the veterinary profession, which includes supporting the workforce.

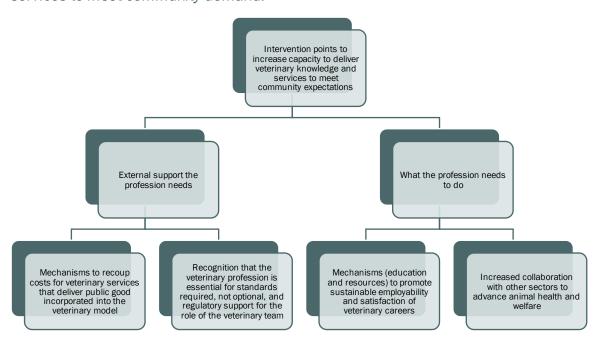
The challenges being faced by the veterinary profession are decades in the making and while there are some short-term strategies that can be put into place to assist, for sustained improvement longer term strategies are required.

Long-term strategies require complex system engineering thinking, collaboration, innovation, and data collection to produce strategies where the outcomes do not have unintended consequences, and are not to the detriment of animal welfare, the community, or the profession.

The barriers to the community accessing veterinary care are increasing. Given that the structure of the profession has evolved to a predominantly privately funded system, the key to improving access to veterinary care to the whole community is to support the existing structure that is in place and ensure there is synergy and symbiosis with adequately government funded veterinary services and charities. Supporting the existing structure involves addressing how the vulnerability of the veterinary business model can be improved, as well as acceptance and adaptation to ongoing societal and generational change.

Addressing the vulnerability of the veterinary business model will require support external to the veterinary profession, from those who benefit from the veterinary profession. That is the wider veterinary industry, animal related industries, and the community – through government support. The profession also has a very important role to play in reducing the vulnerability of the business model, as well as adapting to generational and societal change.

Figure 5 - Intervention points to increase capacity to deliver veterinary knowledge and services to meet community demand.





2.1 External support the profession needs

Mechanisms to recoup the costs of delivery of public good incorporated into the veterinary model

Providing mechanisms for the private veterinary sector to recoup the cost of delivery of veterinary services for public good is essential to improve the sustainability of the veterinary profession. By receiving payment for all public good work undertaken, increased investment in the labour component of the profession is possible, which will lead to improved recruitment and retention.

While further research will likely uncover further areas of veterinary services public benefit and better quantify those that we are already aware of, there are some areas where the public benefits delivered by veterinarians are clear. These should form the first areas for additional public investment:

- Animal care during emergency disaster situations To ensure animal welfare in times of disaster is sufficiently supported, the AVA strongly believes that arrangements for veterinary services to disaster impacted animals (livestock, pets, and wildlife) needs to be clearly recognised at a national level through the Disaster Recovery Funding Arrangements (DRFA) to assist state and territory arrangements and establish assistance measures. This will ensure the provision of necessary veterinary services in disaster-stricken regions, safeguarding animal welfare and reducing the financial strain on private veterinary businesses.
- Animal management of strays/homeless animals Despite the collection of animal
 management fees, impoundment fees, and government grants for decades by local
 government, there is no consistency of payment for veterinary services or using private
 infrastructure for the animal management of lost, stray, and homeless animals and these
 costs are frequently borne by the private veterinary sector.

The cost and impact of the provision by the veterinary profession of these services has been unrealistically ignored in the drafting of most legislation which transfers responsibility and costs from an agency to the veterinarian. There is a lack of consistency between local councils in how they interpret legislation, engage and pay veterinary practices to manage strays and provide expertise around animal management in times of crisis.

Veterinary care of animals owned by the Crown (wildlife) - The available data provides
evidence that private veterinary practices are not able to recoup their costs for services
provided to wildlife, with 92% of veterinarian survey respondents stating that they never or
rarely received reimbursements (Orr and Tribe, 2018). The same study found that the pro
bono nature of wildlife care limited the timeliness and extent of the care able to be delivered
to these animals.

The rising cost of providing veterinary care to wildlife is rapidly becoming unsustainable. The public expects that Australian native wildlife are the responsibility of the government and are often shocked to find that veterinarians don't receive any assistance with the provision of care.

The AVA recommends the Australian Government commit to programs that will allow private veterinary businesses to recoup the cost of delivery of veterinary services to Australia's wildlife.

Finding 3 of the NSW Parliamentary Inquiry into the Veterinary Workforce Shortage recognised these needs: That veterinarians provide a significant public good by providing services to injured wildlife, and stray, lost and homeless animals that is not currently appropriately recompensed by the NSW Government.



By acknowledging the importance of the public benefit the veterinary profession provides and addressing how the cost of delivery can be recouped, we can improve the sustainability of veterinary service delivery to our community.

Assisting regional and primary production veterinary services

Broader investment, particularly in rural and regional veterinary services, in recognition of the public benefit these services provide, and the risk of losing them without appropriate investment, is part of this support. Similar to other professions, rural and regional Australia has become increasingly less attractive to veterinary professionals. This is partly because urban centres have better provision of vital community services such as healthcare, housing, and childcare, as well as improved employment opportunities for partners or other family members.

In this context, the solutions are multifaceted:

- Support for getting students and graduates to rural and regional Australia
 - Educational fee relief, or commitment to rural practice schemes, for graduate veterinarians to assist in the shortage of rural veterinarians, particularly in production animal services.
- Making rural and regional veterinary practice more attractive as an ongoing career option
 - Profession-led innovation to the afterhours model to improve access to veterinary care whilst improving sustainability within the profession.
 - Legislative reform that would provide flexibility to the veterinary team around the way veterinary knowledge and services are delivered in rural and remote environments i.e. utilisation of remote technologies.
 - Mechanisms that provide business support through infrastructure or other incentives for the private veterinary sector to have a presence in rural communities. For example, funds to subsidise long-term locum accommodation/relocation fees, and inclusion of registered veterinarians within other current mechanisms to sustain medical and paramedical workers in rural areas, under the accepted One Health model approach for health in Australia.
- Equipping veterinarians for modern production animal practice
 - Ensure that we are training the next generation of production animal veterinarians to help them maximise their value to individual primary producers.
- Improving primary producer engagement of veterinarians
 - Getting veterinary expertise onto farms to undertake passive biosecurity surveillance and work with primary producers to improve animal welfare, herd health, farm planning and practices.



Recognition that the veterinary profession is essential for standards required, not optional, and regulatory support for the role of the veterinary team

Veterinary care must be regulated to protect animal health and welfare of all species and the safety of the community. By extension, this means those providing that care must be regulated, and it be enforced. Regulatory frameworks must be explicit that provision of veterinary care is essential for appropriate animal health and welfare standards to be met in all species. Legislative reform should remove exemptions for animals such as wildlife and production animals or particular painful husbandry procedures from animal welfare legislation to maintain consumer confidence in modern animal welfare legislation.

All veterinary services, irrespective of species served, must be delivered by appropriately regulated veterinary team members under the overarching supervision of a veterinarian. This will require expansion of the regulatory framework of the veterinary profession to include veterinary nurses, veterinary technologists and potentially other paraprofessionals. This would allow them to undertake an increased complexity of activities under veterinary supervision. The complexity of veterinary science and the skill set of the profession have parallels with the human health sector, and the veterinary sector needs to evolve to accommodate this. These professionals would need to operate under the licensure and supervision of an appropriately qualified and regulated veterinarian to ensure monitoring, accountability, and maintenance of standards.

Furthermore, regulatory support needs to ensure that the provision of veterinary services can be achieved in the most effective and efficient way, acknowledging that adaptation and flexibility is key to this.

Effective and efficient provision of veterinary services would be enhanced by:

- Legislative reform that would provide flexibility to the veterinary team around the way veterinary knowledge and services are delivered in rural and remote environments (e.g., telemedicine)
- Strategies to improve efficiency around the required regulatory burden
- Legislative reform to enable the costs of legislated requirements of basic care to all animals (e.g., relief of pain and suffering or first aid) to be recouped
- Support of the lifelong learning required by the profession to remain contemporary
- The provision of legislative protections for veterinary team members, given the increase of abuse and assault by the public.



2.2 Steps the profession needs to take

Continue to build on mechanisms to promote sustainable employability and satisfaction of veterinary careers.

Sustainable employability means that, throughout their working lives, workers can achieve tangible opportunities in the form of a set of capabilities. Concurrently, they will also enjoy the necessary conditions that allow them to make a valuable contribution through their work, now and in the future, while safeguarding their health and welfare (van der Klink et al., 2016). By achieving this, the intent is that increased length of participation within a veterinary career will be realised. The mechanisms used must acknowledge and adapt to societal and generational change or it is likely they will fail.

Mechanisms that have been identified to be important include:

- An integrated wellness approach assessing and addressing workplace or workforce mental health. This is outlined in the THRIVE mental health and suicide prevention framework, part of the THRIVE initiative, a profession-led initiative the AVA is championing. This framework encompasses the philosophies of Prevent, Promote and Protect.
- Mechanisms to improve workplace culture and safety, workload, and flexibility.
- Increasing wellbeing in the profession through recognition of the importance of non-technical skills and other factors.
- Career progression and recognition pathways.
- Collaboration with veterinary educators to allow the profession to prepare for generational change and for the educators to understand the needs of the profession. The recent veterinary education review by the Veterinary Schools of Australia and New Zealand has made several recommendations in this area (VSANZ, 2023). There is a place for consideration of the type of students universities should be selecting to undertake a veterinary course. However, student selection is only one contributor to the sustainability and satisfaction of a veterinary career. The notion that if the student selection criteria differed, the current challenges occurring in the profession would not be occurring, is simplistic and fails to acknowledge the contribution the current structure of the profession and its business model has on its workforce.

The profession is working hard to achieve sustainable employability, and there is much work to be done. A coordinated response and collaboration across all areas of the profession is required to minimise duplication of effort and make sure gaps are identified. This is slowly occurring through a shared desire of organisations to make meaningful change.

Increased collaboration with other sectors to advance animal health and welfare

The veterinary profession needs to proactively collaborate with a range of sectors to advance animal health and welfare. Examples of this include:

- Collaboration with animal industries to develop long term strategies to improve access to veterinary care and maximise animal welfare as well as improve biosecurity.
- Collaboration with other sectors to allow improved access to social supports for people
 experiencing vulnerabilities, as this can lead to improved health and welfare outcomes of
 their animals.



2.3 Workforce data collection

Adaptation to societal and generational changes means being prepared for, and ideally able to anticipate, changes. Understanding workforce participation and capacity to surge at increased times of demand is required. Delivery of this understanding requires improved data collection and management of the workforce.

Harmonised data collection across all Australian jurisdictions would be the first step. Initial steps towards data collection harmonisation are being taken, however, this requires the willingness of all jurisdictions to participate and resources to collect the data. Harmonised data collection would facilitate accurate workforce modelling to predict future need in several scenarios. For example, it is currently unknown if the profession needs to graduate more veterinary students or if improved retention and regulation of the wider veterinary team would be sufficient. Until detailed modelling is undertaken, strategies such as an increase in student numbers could have long-term unintended consequences.



SECTION 3

Conclusion

The predominantly privately funded veterinary profession delivers essential services to the Australian community. However, there is currently inadequate capacity to meet growing community demand for veterinary knowledge and services. The underlying causes lie in the structural vulnerability of the veterinary business model, compounded by societal and generational shifts.

The strategies outlined in this white paper aim to strengthen capacity and improve the long-term sustainability of the profession. Achieving this will require coordinated action, collaboration, and commitment across government, industry, education, and the profession itself.

The time to act is now.



References

Animal Medicines Australia (2019). Pets and the Pandemic: A social research snapshot of pets and people in the COVID-19 era. Available from:

https://animalmedicinesaustralia.org.au/report/pets-and-the-pandemic-a-social-research-snapshot-of-pets-and-people-in-the-covid-19-era-2/

Animal Medicines Australia (2022). Pets in Australia: A national survey of pets and people. Available from: https://animalmedicinesaustralia.org.au/report/pets-in-australia-a-national-survey-of-pets-and-people-2/

Australian Bureau of Statistics (2024). Working arrangements. Available from: https://www.abs.gov.au/statistics/labour/earnings-and-working-conditions/working-arrangements/latest-release

Australian Veterinary Association (2021a). Veterinary Workforce Survey 2021. Available from: https://www.ava.com.au/siteassets/news/ava-workforce-survey-analysis-2021-final.pdf

Australian Veterinary Association (2021b). Veterinary Wellness Strategy: Summary of research findings. Available from: https://www.ava.com.au/siteassets/resources/thrive/documents/ava-short-report-research-findings.pdf

Australian Veterinary Association (2024). Veterinary Workforce Survey 2023-24. Available from: https://www.ava.com.au/siteassets/advocacy/workforce-survey/ava-2023_2024-workforce-survey-report.pdf

Arbe Montoya AI, Hazel SJ, Matthew SM, McArthur ML. (2021) Why do veterinarians leave clinical practice? A qualitative study using thematic analysis. Vet Rec. Jan;188(1):e2. doi: 10.1002/vetr.2. Epub 2021 Jan 12. PMID: 34651756.

Bell, M., Secombe, C., Schull, D., et al. (2021). Workforce sustainability in equine veterinarians - perceptions of stayers and leavers.

Epp, T. and Waldner, C. (2012) Occupational health hazards in veterinary medicine: physical, psychological, and chemical hazards. Can Vet J. 2012 Feb;53(2):151-7. PMID: 22851776; PMCID: PMC3258828.

Governance Institute (2023) Ethics Index 2023. Available from: https://governanceinstitute.com.au/app/uploads/2023/11/2023-ethics-index-report.pdf

Gustafsson, L. (2021). Australian labour force participation: historical trends and future prospects. Available from: https://treasury.gov.au/sites/default/files/2021-04/p2021-164860 australian labour force participation.pdf

Hatch, P.H., Winefield, H.R., Christie, B.A., et al. (2011) Workplace stress, mental health, and burnout of veterinarians in Australia. Australian Veterinary Journal. 2011;89:460-468.

Jeyaretnam J, Jones H. (2000). Physical, chemical and biological hazards in veterinary practice. Aust Vet J. 2000 Nov;78(11):751-8. doi: 10.1111/j.1751-0813.2000.tb10446.x. PMID: 11194720.

Kipperman, B.S., Kass, P.H., Rishniw, M (2017). Factors that influence small animal veterinarians' opinions and actions regarding cost of care and effects of economic limitations on patient care and outcome and professional career satisfaction and burnout. Journal of the American Veterinary Medical Association. 2017;250:785-794.



Moore, I.C., Coe, J.B., Adams, C.L., et al. (2014). The role of veterinary team effectiveness in job satisfaction and burnout in companion animal veterinary clinics. Journal of the American Veterinary Medical Association. 2014;245:513-524

Neill, C.L. (2022). The multimarket model of the veterinary industry, JAVMA,c 260:12

Neill, C.L., Hansen, C.R., Salois, M. (2022) The Economic Cost of Burnout in Veterinary Medicine. Frontiers in Veterinary Science. 2022;9

Orr, B., Tribe, A. (2018). Animal welfare implications of treating wildlife in Australian veterinary practices. Australian Veterinary Journal. 2018;96:475-480.

Pratt G. (2023). Veterinarians in Australia: A growing profession in need of a plan [dissertation]. University of New England.

Secombe, C. (2024). Declining engagement of veterinary services in Australian animal production systems: why has this occurred and what are the risk? Australian Veterinary Journal 102:1-2

Quality Indicators for Learning and Teaching. (2022) Graduate Outcomes Survey. 2022. Available from: https://www.qilt.edu.au/surveys/graduate-outcomes-survey-(gos)

World IBIS (2023). Australia Industry (ANZSIC report) Veterinary services in Australia. 2023. Available from: my.ibisworld.com.au

World IBIS (2024). Australia Industry (ANZSIC report) Veterinary services in Australia. 2024. Available from: my.ibisworld.com.au

van der Klink JJ, Bültmann U, Burdorf A, Schaufeli WB, Zijlstra FR, Abma FI, Brouwer S, van der Wilt GJ. (2016) Sustainable employability-definition, conceptualization, and implications: A perspective based on the capability approach. Scand J Work Environ Health. 2016 Jan;42(1):71-9. doi: 10.5271/sjweh.3531. Epub 2015 Nov 23. PMID: 26595874.

VSANZ (2023). Rethinking Veterinary Education. Available from: https://vsanz.org/wp-content/uploads/2023/07/VSANZ Rethinking-Vet-Ed Low-Res-FINAL-CLEAN.pdf