

Submission
No 161

INQUIRY INTO VETERINARY WORKFORCE SHORTAGE IN NEW SOUTH WALES

Organisation: Sydney School of Veterinary Science, University of Sydney

Date Received: 21 July 2023



THE UNIVERSITY OF
SYDNEY

Sydney School of Veterinary Science
Faculty of Science

JACQUELINE NORRIS

Head of School and Dean
Sydney School of Veterinary Science
University of Sydney

21st July, 2023

Inquiry into the veterinary workforce shortage in New South Wales

Thank you for the opportunity to contribute to the Legislative Council Portfolio Committee No.4 - Regional NSW's inquiry into the veterinary workforce shortage in New South Wales.

We have addressed each question from the perspective of the Sydney School of Veterinary Science (SSVS) and our interactions with the veterinary profession nationally and internationally. Our veterinary school is an internationally accredited veterinary school with the Australasian Veterinary Board Council (AVBC), Royal College of Veterinary Surgeons (RCVS) and American Veterinary Medical Association (AVMA), graduating ~120 students in the Doctor of Veterinary Medicine each year.

The committee would be aware of the review into veterinary education '[Rethinking veterinary education: Securing Australasia's future in biosecurity, food production, One Health and animal welfare](#)'. We would also like to draw your attention to the [submission](#) from the University of Sydney to this review and the [media release](#) from the University on the release of the report on July 17th 2023. In our submission to the veterinary review, we commented on elements to assist in the workforce stability, clinical education, research, funding, accreditation, engagement, and advocacy.

As outlined in our attached submission to this inquiry, we make the following recommendations regarding strategies to support the current veterinary workforce, increase the number of practising veterinarians particularly in regional, rural and remote New South Wales, and to improve veterinary care:

- **Practitioner support** – introduce a compulsory mentoring system based on the longstanding New Zealand model; ethical rounds; enhanced proficiency at graduation through degree tracking; greater advocacy from veterinary schools, industry organisations and the veterinary practitioners to engage more effectively with key stakeholders in government, industry and the wider community; assistance in recruitment of overseas vets through timely visa; assistance from government departments such as NSW DPI in provision of free testing to support livestock and

equine industries in disease surveillance and enhance the connection of veterinarians with herd health.

- **Student support** – consider financial incentives for graduates working in rural or remote areas; increased scholarships co-funded by philanthropy government and industry; opportunities to build greater proficiency and training by selection of species tracking.
- **Funding support** – for veterinary education costs to schools and clinical placements for students; industry/government supplemented wages especially in veterinarians involved in critical areas of need.
- **Changes to governance or regulation** – national registration system for veterinarians and veterinary nurses; options for accreditation reform through Australasian Veterinary Board Council (AVBC) to allow responsiveness to educational innovation and allow tracking/streaming during veterinary training to maximise veterinary education resources and increase graduate proficiency in areas of preferred practice.

Thank you for undertaking such a critical inquiry for our profession and the health and welfare of animals and communities in New South Wales.

Please do not hesitate to contact me if you require any further information or clarification.

Yours sincerely,

Professor Jacqueline Norris
BVSc, MVStud, PhD, Grad Cert High Ed., FASM, Specialist RCVS (Veterinary Microbiology)

Inquiry into the veterinary workforce shortage in New South Wales; Submission from the Sydney School of Veterinary Science

- (a) the shortage of veterinarians across the profession, including clinical (small and large animal practice), government, academia, research, industry and pathology and;**
- (b) the challenges in maintaining a sustainable veterinary workforce, including recruitment and retention rates**

In NSW and more broadly, the Australasian veterinary profession and its education system are at crisis point. Current funding models and approaches to veterinary science education, research and service delivery are not sustainable. They jeopardise veterinary workforce renewal and the critical need for research capability to be met. This systemic problem requires genuine engagement and collaboration from multiple parties including the profession through its representative bodies, the accrediting bodies, the Commonwealth, State and Territory governments, industry and community consumers of veterinary services, universities and other education providers.

The University of Sydney School of Veterinary Science employs 80 veterinarians in continuing academic positions across many disciplines from professional practice to pathology to livestock health to animal welfare. This involves a range of veterinarians with higher research degrees (e.g. PhD, MPhil) as well as registered veterinary specialists in clinical disciplines such as small animal medicine, equine sports medicine, oncology, equine surgery, ruminant health, and non-clinical specialists such as clinical pathology, anatomical pathology, microbiology and epidemiology.

In the last three years we have seen an exodus of specialists in diagnostic imaging, emergency & critical care, anaesthesia, surgery (small animal and equine) from academia into private practice - where their earning capacity has increased exponentially in the last two years. This has created significant deficits for teaching of our Doctor of Veterinary Medicine (DVM) programs, advancement of clinical research and cessation of specialist training programs (residency).

For many years, Commonwealth funding linked to enrolments of domestic Commonwealth-supported students has not met the costs of teaching the DVM program. At the University of Sydney, on average over the past four years, the annual funding gap per full-time Commonwealth-supported veterinary student has been 36 per cent of actual costs, or almost \$20,000 each. The University therefore continues to subsidise the cost of veterinary education. This along with the growing cost of employing veterinary professionals to deliver the teaching outcomes is exacerbating the challenges we face with recruitment.

Recruitment for replacement staff to teach, research and perform clinical work has involved international proactive advertisements, head hunting and reframing academic life to include the many benefits it affords veterinary professionals in the advancement of knowledge and the training of future generations. We face great difficulty recruiting in some positions that normally require a registered specialist. This has forced us, for example, to employ veterinary graduates with a lower level of advanced training in the discipline such as membership of the Australian and New Zealand College of Veterinary Scientists (by examination).

Successful, albeit expensive international recruitment drives in some disciplines (e.g. anaesthesia) have been significantly hindered by extensive delays (greater than 6 months) in obtaining visas. These delays have occurred despite the suitability of the successful applicants' qualifications and the critical need for these veterinarians nationally. In one recent case (equine ambulatory clinic) an excellent candidate from Europe withdrew due to the extensive delays they experienced obtaining a working visa.

In other disciplines, such as veterinary parasitology, veterinary microbiology, and wildlife health, there have been excellent responses to recruitment with a range of highly qualified and appointable applicants.

(c) the burn-out and mental health challenges facing the veterinary profession

The Sydney School of Veterinary Science recognises the significant mental health challenges that the veterinary profession faces in all sectors. A critical part of the changes to our veterinary curriculum in 2015 to the DVM resulted in substantial increases in the time given in the curriculum to resilience, self-care, ethics, welfare, work-life balance, and communication from their first day in DVM Year 1. We have researchers in our school who both teach and research into important aspects that contributes to burn-out and mental health challenges. Research in this area, which peaked during COVID-19, has shown the risks factors around mental health challenges including ethically challenging situations which our profession faces daily. Research on the value of 'Ethics Rounds' has shown significant improvement in practitioner feelings of well-being. DVM student engagement in this work (Yang et al 2019) has shown that higher psychological distress is seen as early as DVM Year 1. There is further work to be done in the design of veterinary curricula that support student learning, maintains high quality training while ensuring psychological safety. The introduction of [new AVBC accreditation standards](#) to more of an outcome focused rather than an input focused assessment of curriculum will assist in supporting the attainment of competency and proficiency as students progress through their degrees to graduation. Mentoring programs for the profession from veterinary students to seasoned practitioners is essential for reducing burn-out and improving mental health. This is outlined in our response to Term of Reference g).

References

- Quain, A., Mullan, S., Ward, M. (2022). Communication challenges experienced by veterinary professionals during the COVID-19 pandemic. *Australian Veterinary Journal*, 100(1-2), 79-81. [\[More Information\]](#)
- Gibson, J., Quain, A. (2022). Embracing clinical ethics support services in the UK veterinary profession. *In Practice*, 44(7), 421-425. [\[More Information\]](#)
- Quain, A., Mullan, S., Ward, M. (2022). Low and No-Contact Euthanasia: Associated Ethical Challenges Experienced by Veterinary Team Members during the Early Months of the COVID-19 Pandemic. *Animals*, 12(5), 1-19. [\[More Information\]](#)
- Pasfield, K., Gottlieb, T., Tartari, E., Ward, M., Quain, A. (2022). Sick leave presenteeism associated with influenza-like illness in veterinarians working in New South Wales: Results of a state-wide survey. *Australian Veterinary Journal*, , 1-11. [\[More Information\]](#)
- Quain, A., Mullan, S., Ward, M. (2022). There Was a Sense That Our Load Had Been Lightened: Evaluating Outcomes of Virtual Ethics Rounds for Veterinary Team Members. *Frontiers in Veterinary Science*, 9, Article number 922049-1-Article number 922049-15. [\[More Information\]](#)
- Quain, A., Ward, M., Mullan, S. (2022). What Would You Do? Types of Ethical Challenging Situations Depicted in Vignettes Published in the Veterinary Literature from 1990 to 2020. *Veterinary Sciences*, 9(2), 1-22. [\[More Information\]](#)
- Quain, A., Ward, M., Mullan, S. (2021). Ethical Challenges Posed by Advanced Veterinary Care in Companion Animal Veterinary Practice. *Animals*, 11(11), 3010. [\[More Information\]](#)
- Quain, A., Mullan, S., McGreevy, P., Ward, M. (2021). Frequency, Stressfulness and Type of Ethically Challenging Situations Encountered by Veterinary Team Members During the COVID-19 Pandemic. *Frontiers in Veterinary Science*, 8, 647108-1-647108-23. [\[More Information\]](#)
- Quain, A., Mullan, S., Ward, M. (2021). Risk Factors Associated With Increased Ethically Challenging Situations Encountered by Veterinary Team Members During the COVID-19 Pandemic. *Frontiers in Veterinary Science*, 8, 752388-1-752388-11. [\[More Information\]](#)
- Littlewood, K., Beausoleil, N., Stafford, K., Stephens, C., Collins, T., Quain, A., Hazel, S., Lloyd, J., Mallia, C., Richards, L., et al (2020). How management of grief associated with ending the life of an animal is taught to Australasian veterinary students. *Australian Veterinary Journal*, 98(8), 356-363. [\[More Information\]](#)
- McArthur, M., Matthew, S., Brand, C., Andrews, J., Fawcett, A., Hazel, S. (2019). Cross-sectional analysis of veterinary student coping strategies and stigma in seeking psychological help. *The Veterinary Record*, 184(23), 1-7. [\[More Information\]](#)
- Yang, H., Ward, M., Quain, A. (2019). DVM students report higher psychological distress than the Australian public, medical students, junior medical officers and practicing veterinarians. *Australian Veterinary Journal*, 97(10), 373-381. [\[More Information\]](#)

(d) the role of, and challenges affecting, veterinary nurses

Veterinary nurses form a critical part of the clinical workforce. Their support for the running of the hospital, care of patients and clients has escalated in the last decade with greater numbers of nurses seeking and obtaining additional qualifications and training within the veterinary sector.

We have recently had the opportunity to employ a large number of veterinary nursing staff in the transfer of our University Veterinary Teaching Hospital-Sydney from an external service provider (VetPartners) back to being University operated and owned. During this process of recruitment, we interviewed over 50 potential staff, some of whom had previously been working in UVTHS but under VetPartners employment. Many of these applicants had extra training and skills in certain areas of veterinary nursing (surgery, anaesthesia, referral medicine, emergency and critical care) and were keen to further advance their expertise, skills and training in these areas and equally passionate about training of other nurses and our DVM students. As part of their new employment with University of Sydney they actively discussed future courses and training opportunities that would be part of their employment package. This is an increasingly highly skilled part of the veterinary workforce with specialty areas emerging as it does for nurses in human health.

In speaking with veterinary alumni of our veterinary school, the labour shortage experienced in veterinary nursing is acutely felt. Practitioners have discussed significant pressures on their nursing workforce for overtime and for training younger less experienced nurses. Some practitioners expressed that their nursing staff are so short of time, they do not have the time to train others. The University of Sydney's [Centre for Veterinary Education](#), has traditionally been a continuing education provider for veterinarians. In the last two years, it has branched out to veterinary nursing training courses to assist the profession in the provision of external conferences, webinars and workshops to build the professional skills of the veterinary nursing workforce.

(e) the role of, and challenges affecting, overseas trained veterinarians

The Sydney School of Veterinary Science has actively recruited and head-hunted for some of our vacant veterinary positions from internships to specialists. The quality of applicants from overseas has been excellent, including most recently in the recruitment for intern positions in Emergency and Critical Care. To be appointable for clinical positions, candidates must hold a veterinary degree from another accredited veterinary school. They must also be eligible to register as a veterinarian with the Veterinary Practitioners Board of NSW. We also have several veterinarians working as veterinary nurses in our teaching hospitals, where their qualifications are not recognised for registration as a veterinarian in NSW. Some are in the process of seeking registration rights following successful completion of the examinations for registration with an

Australian veterinary board.

One of the great impediments to timely employment of veterinarians recruited from overseas is the extensive delays too many applicants face obtaining a visa despite the specific assistance afforded by the University's international recruitment team and pleading letters of advocacy from the University.

(f) the arrangements and impacts of providing after-hour veterinary services

Our veterinary teaching hospital at Sydney (UVTHS) provides a 24/7 service for emergencies, with veterinary and nursing staff rostered around the clock. The recent exodus of specialists in emergency and critical care has resulted in a workforce of staff veterinarians lead by a veterinarian with additional qualification in Emergency and Critical Care (Memberships of the ANZCVS). This service is very busy and services the surrounding veterinary clinics during the times their clinics are closed. Staff shortages from December 2022 until recently have resulted in systems of case diversion, ensuring staff are able to deal with the urgent critical emergencies, having to send away animals in need of less critical help.

In our equine and livestock clinical services at the Camden campus, we provide after-hours ambulatory service for these species, whereby our staff visit the properties at which the animals reside. Marked shortages and loss of staff in equine services have seen significant increases in the need for our staff to be on the on call more frequently than ever before. The shortage of staff is getting to a critical level for equine care, whereby we may not be able to provide after-hours service in the future unless we can achieve sustainability in our equine clinical workforce. As you will see from Table 2 (response to ToR g), few graduates are entering equine practice immediately following graduation due, in part, to the heightened expectations required from equine clients. This highlights the need for consideration of tracking or streaming within the veterinary degrees, as well as the need for greater support for advanced postgraduate training.

We are experiencing significant shortages in veterinary pathology specialists, which is part of a national shortage. While this does not affect after hours services in small animals, it does affect after-hours delivery of equine services due to the need to perform rapid necropsies on horses due to rapid deterioration of cadavers which are difficult to keep adequately refrigerated for extended periods due to their size. Pathology residencies across all universities and within government agencies (e.g. state departments of primary industry) need to occur to enhance the pipeline and workforce. This could be facilitated by scholarship opportunities for these advanced training opportunities.

(g) the impact of the current legislative and regulatory framework on veterinarians

Veterinary Education

The current legislative and regulatory framework regarding the base funding for veterinary education results in significant underfunding that jeopardises the ability to provide high quality education in the future and compromises the position of each veterinary school within its University. As noted above, at the University of Sydney, on average over the last four years, the annual funding gap per full-time Commonwealth-supported veterinary student has been 36 per cent, or almost \$20,000 each, and we know that all other universities face similar funding shortfalls sustaining high quality veterinary science programs in the national interest. With the DVM requiring four years of full-time equivalent study to complete, producing each domestic Commonwealth-supported veterinary graduate leaves the University with a funding deficit of about \$80,000.

Table 1 gives an indication of the total number of Doctor of Veterinary Medicine graduates per year differentiated by the admission route - domestic (Commonwealth-supported Place) and international (full fee-paying). Note 2018 was the first year of the DVM and had graduate entry only with reduced student intake for the new program.

Table 1: Number of Doctor of Veterinary Medicine graduates per calendar year between 2018-2022 divided by domestic or international candidature

Year of Graduation	2018	2019	2020	2021	2022
Domestic	40	92	82	74	51
International	11	34	35	44	66*
Total	51	126	117	118	117

***This higher than usual number of international student graduating in 2021 and 2022 represented the effects of the COVID-19 on students unable to enter Australia or leave their country of origin if they had returned during the height of the pandemic, delaying their academic progression due to the critical nature of in-person learning activities in many units of study.**

While full fee-paying international students offset to some degree the major financial losses experienced by the domestic student load, the School carries a multimillion deficit budget that is tolerated by the University due to public good of veterinary science in the community. Increasingly though, this is becoming untenable for some veterinary schools and an [independent review of veterinary science education](#) released in July 2023 by Veterinary Schools Australia New Zealand (VSANZ) indicates that based on submissions there is at least one University contemplating closure of its veterinary school.

Controversies have arisen regarding the impact of international student placements and the perceived divergence from Australia's national interest. Graduates of our DVM are surveyed each year to determine amongst other things, their destination following graduation. Reviewing graduate survey responses from 2018-2022 (n=167) which are conducted 6 months after graduating indicate that 43% (20/47) of University of Sydney DVM graduates who entered

the program via the international student pathway had obtained a veterinary job in Australia before graduating, indicating the high number of our international veterinary graduates who contribute to the Australian veterinary workforce. These kinds of surveys are voluntary, however, information of this type is essential for workforce planning and needs to be undertaken in a more comprehensive way through a national registration of veterinarians.

Table 2: Survey of DVM graduates from the University of Sydney 2018-2022.

Country of origin				
	Total	Australia	Other	Not stated
	n=167	n=111	n=47	n=9
Type of employment				
Small animals	69	48	18	3
Mixed large/small animal	63	44	15	4
Large animals - mixed	8	3	5	0
Equine	2	1	1	0
Other	8	3	3	2
Not stated	17	12	5	0
Location of first job or job offer				
Total	116	79	31	6
Australia	100	74	20	6
Overseas	13	2	11	0
Not stated	3	3	0	0

The causes of the bottle necks limiting our School's capacity for growth in admission numbers are currently two-fold – 1) financial and 2) the limited number of students that we can facilitate through our current teaching hospitals. The latter will be ameliorated as we rebuild our teaching hospitals due to the support of our University, but the former requires substantial higher education reform to allow adequate remuneration of veterinary schools for high quality veterinary education. In considering this it is important to remember that beyond the endeavour to graduate high quality veterinarians is the need for veterinary schools to continue with the advancement of veterinary research.

Critical to the effective use of limited educational resources and the maintenance of high-quality educational outcomes is the serious consideration of a change from graduating the 'omnicompetent veterinarian' trained equally across all domestic species, to the prospect of 'tracking' or 'streaming' that allows students to choose areas of focus for study in the third and fourth years of the degree following a common core in years 1 and 2. This is successfully executed in many other leading veterinary schools globally and does not restrict registration. Veterinary schools are currently unable to alter their curricula to enact this due to regulatory restrictions from the accrediting body, the Australasian Veterinary Board Council. Increased client expectations of veterinary proficiency at the time of graduation across all animal species

compared with 30 years ago, requires serious consideration of streaming in veterinary education just as majors in most Bachelor of Science degrees allow graduates confidence in a particular area of science.

The Veterinary Profession

Domestic students with Commonwealth-supported places graduate with a debt of ~\$50,000 from student fees for the DVM plus whatever debts they have incurred from their undergraduate studies. In addition, they have the potential debt of living expenses accrued during their degrees. The veterinary degrees variably administered across the country have a high workload and final year is especially demanding of time (>40 weeks of clinical placements at University teaching hospitals or private practices in a range of different locations). Unlike degrees in other health disciplines, veterinary students do not receive federal or state government funding support of their clinical placements. Support for clinical placements through financial bursaries, travel grants, collaboration with aligned systems of accommodation support seen in other health professions in human medicine would greatly benefit veterinary students and reduce their debt on graduation.

The State and Territory veterinary boards provide variable governance and regulation over the Australian veterinary workforce. National registration for veterinarians is essential, especially for a country like Australia, which has a low population (26 million) and small veterinary workforce (15,000) relative to an enormous landmass that is highly susceptible to natural disasters. It would provide a better understanding of the workforce especially if annual registration was contingent on completion of an annual survey. This would provide accurate demographics on the profession that could inform admission process and support structures. This is a specific recommendation in the independent veterinary review.

Under the current legislative framework, veterinarians carry the full legislative burden of responsibility for workplace health and safety for all employees and clients/owners. This responsibility is performed by veterinarians judiciously and willingly, but an altered distribution of governance and responsibility needs to be considered.

The current veterinary practitioner legislative framework places the responsibility for veterinary professional performance firmly with veterinarians who are the only professionals that are subject to registration and oversight by the Veterinary Practice Board. Veterinary nurses and other paraprofessionals such as equine dentists, chiropractors, farriers are not required to be registered and thus are not subject to an enforceable performance standard overseen by a Professional Board. Two negative outcomes are (1) Animal welfare can be seriously impacted by non-veterinary practitioners that undertake activities at a standard that would not be acceptable in the veterinary profession without being subject to professional oversight or the need to provide appropriate recourse for their failures, potentially leaving the public and their animals in a perilous situation; (2) Veterinarians are held accountable personally for their own and their practice's professional performance which places a huge indemnity insurance burden

commonly not recoverable within cost structures acceptable to their clients. Both aspects can have negative economic and professional impacts, including loss of reputation and registration.

A more equitable arrangement that requires all paraprofessionals to be registered and subject to performance standards, as well as their own insurance and WHS obligations would relieve the current pressure on the veterinary profession which is already experiencing significant other professional pressures.

Mentoring programs for the profession from veterinary students to seasoned practitioners are essential for reducing burn-out and improving mental health. Mentoring programs that span governing bodies, industry bodies and universities are critical to workforce stability, ongoing animal welfare and welfare of the profession. An excellent example is evident in New Zealand where the New Zealand Veterinary Association (NZVA) partners with the Veterinary Council of New Zealand (VCNZ), Massey University School of Veterinary Science, and the Veterinary Professional Insurance Society to provide NZVET Mentoring Support for new graduates, using a mentoring software platform to match recent graduates with experienced professionals. VCNZ utilises mandatory continuing professional development requirements to encourage all new graduates to have a supervisor and is currently considering strengthening this approach by requiring a named supervisor. With the Veterinary Board of NSW already requiring compulsory continuing professional development requirements this would be feasible. It would enhance current systems in Australia such as the AVA Graduate Mentoring Program which is a structured 12-month program connecting experienced veterinarians with new graduates to receive one-on-one advice and support as they transition into the profession. Larger corporate practices also have structured mentoring programs.

(h) the particular challenges facing the veterinary profession and the shortage of veterinarians in regional, rural and remote New South Wales

Veterinary practices in urban areas offering excellent working conditions to veterinarians with the possibility of part-time work, no after hours and reasonable remuneration are attracting veterinarians to work at their practices. They are generally supported by nearby specialist practices to refer more complex cases or cases where the equipment or facilities are not afforded by the primary care practice. After hours care of patients is more easily dealt with by emergency and critical care services in the large metropolitan areas.

In contrast, most regional, rural and remote veterinary practices find it difficult to attract veterinary staff due to perceived poor work-life balance, small workforce, and the need to supply after-hours service to their clients. This extends the length of the working week and adds to the stresses of work in these areas due to lack of professional support.

Initiatives at SSVS to recruit DVM students from rural areas including lower academic criteria for entry when coupled with greater real-world experience and the increasing availability of

scholarships to support a student through their entire degree (scholarships of up to \$40,000/year for living expenses in Sydney and/or domestic fee waivers). This is increasing the number of students entering from rural backgrounds but doesn't necessarily lead to an increased workforce in these communities. Incentives to encourage graduates from rural areas to return to rural areas and encourage graduates from urban areas to work in rural areas are critical, which could include education debt waivers, and industry/government supplemented wages especially in veterinarians involved in critical areas of need in agricultural, biosecurity and emerging industries (e.g, aquaculture).

(i) the role played by veterinarians in providing care to lost, stray and homeless animals, injured wildlife and during emergency situations

Lost strays and homeless animals and injured wildlife are seen daily in our small animal teaching hospitals in Sydney and Camden and our dedicated Avian Reptile and Exotic Pet Hospital (AREPH) at Camden. Because we are a teaching hospital, we assign up to \$80K/year in funds to support these animals under our care. This is supported in part by dedicated philanthropic funds assigned to these animals as well as animals owned by clients with restricted financial means in which up to \$50,000/year is spent to treat simple ailments.

For private practitioners the support for strays homeless and wildlife is a considerable cost to the commercial business.

(j) the impact of the current veterinary shortage on animal welfare, including the impact on the economy, members of the public seeking veterinary care for animals, pounds and shelters, the animal agribusiness industry, companion animal breeders and others

Without doubt, delays and hesitancy in seeking or receiving basic veterinary care on immediate diseases and preventative strategies negatively impacts animal health and welfare. Advancement of clinical signs and disease progression negatively impact patient health outcomes. This risk is across the sector but felt most acutely in rural and remote areas where the strains on the veterinary work force is more severe, the availability of assistance with patients requiring specific expertise is reduced and the tyranny of distance impairs assistance.

Shortages in the veterinary workforce driven by rapid salary increases, increase part-time preferences of the workforce to balance work and life, and competition for specialist recruitment have impacted the university teaching hospitals capacity to see all patients in a timely way with waiting times in some disciplines including primary care. The instability in the nursing workforce and competition for experienced nurses has equally driven the increase in salaries and shortages in workforce. This has settled in the last few months as all nursing staff have moved to become university staff and the favourable work conditions and remuneration this provides compared to industry. However, the ongoing concern regarding the needs of

animals for disease treatment and prevention remains.

The curriculum of all Australian and New Zealand veterinary schools has a strong focus on the principles and frameworks of animal welfare. A collaborative initiative across all schools built a common educational framework through the 'One Welfare' portal which provides all schools with educational resources that prioritises animal welfare as a framework for their role as veterinarians in the community. The strong drive in the veterinary profession to protect animal welfare does lead practitioners to work long hours to meet these important societal need to protect animals.

Disease surveillance is a critical element of disease preparedness in ensuring containment of endemic and transboundary diseases across all animal species. The impacts of veterinary workforce shortages and especially the capacity for surveillance of disease and the maintenance of welfare in rural and remote areas, places huge risks for greater impacts on animal welfare in the event of a major outbreak due to the potential for delayed disease recognition. In diseases as serious as Foot-and-Mouth disease in livestock or rabies in all mammals this would result in mass morbidity and the enactment of biosecurity measures resulting in mass euthanasia, including potentially our native mammals. Support for veterinary surveillance systems through re-enactment of the support given via NSW DPI and other government agencies for the free testing of samples is essential along with measures discussed earlier regarding increasing the workforce.

Another area that has been identified with a gap in veterinary expertise is in the welfare of animals in the research and teaching environment. While a comparatively small aspect of the totality of animal care, it is an area that receives legitimate community attention particularly as a recipient of public purse funding. A recent ANZCCART survey¹ has identified that the public in Australia is predominantly comfortable with animal research being conducted that provides benefits to humans, animals and the environment, but they do want greater reassurance about the care of research animals. The balance between the justification for animal research and the welfare of the animals in research and teaching is the key consideration of the Animal Ethics Committees, on which are dedicated, qualified and experienced veterinarians fulfil an essential role. They, along with the Laboratory Animal Veterinarians and Animal Welfare Veterinarians assist researchers to design and conduct their research in accordance with the 3Rs and welfare expectations of the Australian Code for the care and use of animals for scientific purposes 2013. Sydney University takes its responsibility in this field very seriously and provides placement for final year veterinary students from across Australia with its Animal Welfare Veterinarians and offers a post graduate internship for veterinarians interested in becoming Animal Welfare Veterinarians in the research sector. The role of veterinarians here provides the reassurance

¹Whittaker A, Buddle E And Ankeny R 2022 Report for The Australian & New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART)

wanted by society and ensures that the social licence for animal research and teaching is preserved.

Providing opportunities for the many career opportunities for veterinarians is key to ensuring that veterinary graduates willingly remain actively engaged in the profession and serve animals, the environment and society in a positive and long-term manner.

(k) current barriers to accessing veterinary care for members of the public, particularly those with lower incomes or who live in regional, rural and remote locations

The escalating costs of veterinary care as well as decreasing availability of services in rural NSW has significantly affected the ability of many ordinary Australians including those with lower incomes, to receive timely affordable veterinary care. This is critical given the animal welfare implications and the importance of the human-animal bond.

The School regularly partners with not-for-profit organisations such as the RSPCA and city councils (eg City of Sydney Council) to offer free pet health checks and vaccinations in local communities as well as subsidised desexing programs. Equally the School uses its philanthropic contributions to our '*Animals in Need Fund*' to support the cost of routine care (e.g. preventative care such as vaccinations, flea control, treatments etc) for vulnerable members of the public. This involves fortnightly outpatient clinics involving our Primary Care veterinarians and the DVM Year 4 students as well as in-patient care for simple veterinary procedures (e.g. dental care). Central to this mission is the needs to ensure high standards of animal welfare, access to services otherwise unavailable to this part of the community and to demonstrate the important role veterinary personnel play in the spectrum of care required in veterinary practice. This is possible for us, given our capacity as a University to attract philanthropic funds and the mission of the school to teach and research. These are different core responsibilities to many private practices.

Funding from commercial organisations (e.g, pharmaceutical and insurance companies), veterinary associations (AVA, ANZCVSc) and local government (Councils) to offer veterinary care at subsidised cost, especially in low SES areas, would be hugely beneficial in enhancing patient outcomes and improving animal welfare. The ability for veterinarians to assign the cost of community support in this way as a tax reduction off their business would also be beneficial.

(l) strategies to support the current veterinary workforce, as well as ways to increase the number of practising veterinarians particularly in regional, rural and remote New South Wales; and m) strategies to improve access to veterinary care

Combining ToR l) and m) to avoid duplication and allowing expansion, the following strategies are suggested in addition to the University's [submission](#) to the 2022 veterinary education review.

- **Practitioner support**
 - compulsory mentoring system based on New Zealand model as outlined in g);
 - ethical rounds as outlined in c) allows a community of practice and support for practitioners dealing with complexities in their daily practice by peer support;
 - enhanced proficiency at graduation through degree tracking as outlined in g);
 - greater advocacy from veterinary schools, industry organisations and the veterinary practitioners to engage more effectively with key stakeholders in government, industry and the wider community
 - assistance in the recruitment of veterinarians and veterinary nurses from overseas through rapid and timely visas to work.
 - assistance from government departments such as NSW DPI in provision of free testing to support livestock and equine industries in disease surveillance and enhance the connection of veterinarians with herd health.
- **Student support**
 - student debt waiver for graduates working in rural or remote areas;
 - support for final year placements through aligned education support systems afforded to other health professions via federal and state government funding
 - opportunities to build greater proficiency and training by selection of species tracking;
 - increased scholarships.
- **Funding support**
 - Adequate support for veterinary education costs to schools to ensure ongoing high-quality education for which Australia is globally renown.
 - Support for clinical placements for students during their training which requires students in years 2 to 4 to attend farms and clinical practices across a wide range of areas within and outside Australia leave students with a significant debt and hinder their ability to engage in regular work,
 - Partnerships with government, industry (AVA, ANZVSc, commercial entities eg insurance companies) and universities to co-fund industry positions, academic positions and student placements in critical disciplines and underrepresented geographies and demographics. These industry/government supplemented partnerships would be especially important in veterinarians involved in critical areas of need such as agriculture, equine, biosecurity and emerging fields (aquaculture). Equally these partnerships could be used to fund animal insurance

schemes for disadvantaged member of the community to ensure animal welfare standards.

- **Changes to governance or regulation**

- national registration system for veterinarians and veterinary nurses to identify workforce trends and enact responses;
- options for accreditation reform through Australasian Veterinary Board Council (AVBC) to allow responsiveness to educational innovation and allow tracking/streaming during veterinary training to maximise veterinary education resources and increase graduate proficiency in areas of preferred practice;
- Exploration of opportunities to leverage NSW Department of Primary Industry for assistance with diagnostic testing, surveillance and advice, without cost to veterinarians or practitioners.
- Exploration of opportunities to leverage NSW Health services especially in rural and remote areas.