

4 August 2008

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Dear Professor Bradley,

Thank you for providing the opportunity to offer comments on the Discussion Paper on the Review of Australian Higher Education, and for allowing me to submit these comments after the official closing date for submissions. I am writing to submit some ideas specifically related to the training of veterinary practitioners, particularly from the point of view of a regional university. I would be happy to meet you or to provide further argument and analysis of the issues raised in this submission.

My comments will address:

1. Issues common to all veterinary schools in Australia
2. Issues peculiar to veterinary courses in regional Universities
3. Issues specific to the Charles Sturt University Veterinary School

1. Veterinary Training in Australian Veterinary Schools

Australia now has seven Veterinary Schools, of which three, Charles Sturt University (CSU), the University of Adelaide and James Cook University (JCU) are comparatively new and still to graduate their first cohorts. Of the seven schools, those at James Cook University and Charles Sturt University are the ones where the population base served is most dispersed and the regions covered are both large and remote.

The seven schools have average enrolments of 65 CSP per year. The four older schools graduate some 300 CSP students per year. In 2010, when the first cohort of CSU and James Cook graduates emerge, the number will increase to 400 per year. In 2013, when Adelaide's first graduates emerge, the number will increase to about 450 CSP graduates per year.

All Australian veterinary programmes currently producing graduates are accredited by the Australian Veterinary Boards Council and the Royal College of Veterinary Surgeons (RCVS). This allows Australian veterinary graduates to register automatically on graduation in Australasia and the United Kingdom. Reciprocal agreements between the RCVS and the European accrediting bodies also

provide access for Australian graduates to employment as veterinarians in Europe. The three new veterinary programmes in Australia will also expect to achieve this level of accreditation to ensure that they meet international standards for teaching, research and clinical service.

International accreditation of veterinary programmes requires student:staff ratios of 7.5:1 or lower, and a very broad range of expertise in a school's academic and clinical staff. It has been estimated that achieving this requirement in all of the Australian veterinary schools will require the recruitment of approximately 210 new academic and clinical staff between 2004 and 2012, at a final additional cost of some \$25 million per annum compared to 2003 levels

Extended periods of clinical training – the training of senior students in clinical settings – are required by accrediting bodies. Without a public sector to provide free placements and clinical access, veterinary training either has to provide its own hospitals (which characteristically operate at a loss because of the competition between teaching and income-generation) or place students in private practices. The latter is becoming increasingly difficult without payment to practitioners to compensate them for their time spent on teaching, observing the students performing clinical procedures and providing assessment of student performance back to the University.

The costs of clinical teaching and maintaining clinical facilities are high and the need to maintain off-campus animal facilities further adds to the overall cost. While the cost of clinical education in medicine and dentistry is similarly expensive, the public health system that provides much of the clinical training for such students effectively shelters the relevant universities from having to fund the clinical training facilities, including the construction and maintenance of facilities.

This is not the case in veterinary training, where almost all of the clinical training needs to occur in University-owned and operated facilities or in private settings. University veterinary schools therefore need to fund and manage their own teaching hospitals or pay practitioners to accept students and train them in their practices. These factors make veterinary education the most expensive in higher education. At the same time, student funding for veterinary education has been declining gradually over many years and, despite the recent amendment to the funding bands, which has provided veterinary education with a small per capita increase (\$1419 or 6%) it is now estimated by the Australasian Veterinary Deans Committee (AVDC) that veterinary training places are funded at some \$6,000 per student per annum less than the true economic costs of training. If estimates by the AVDC were accepted and students in the final two clinical years were funded at an additional \$12,000 per annum, the major funding problem would be largely resolved. This amount would ensure that clinical infrastructure costs can be met and go some way to properly funding the low student:staff ratios at least in the two clinical years of each course. The additional cost of such a measure would be approximately \$11 million across the seven schools.

There is an urgent need to have an independent assessment of the cost of teaching university courses and veterinary courses in particular so that governments can make realistic decisions about the size of the training system.

Veterinary specialisation is now the norm in developed countries. It is expected that every veterinary school will have veterinarians with postgraduate training to specialist qualification levels in at least the majority of the following disciplines: small animal surgery, equine surgery, small animal internal medicine, equine medicine, diagnostic imaging, clinical pathology, anatomic pathology, microbiology, farm animal medicine, pharmacology. However, there is substantial competition from the private sector for such highly qualified people, putting ever-increasing pressure on the salaries of academics and the capacity of universities to recruit and retain suitably qualified staff.

In medicine the government provides funding to pay medically qualified staff a clinical loading to recognise their additional expertise and to assist in attracting and retaining medically qualified staff

to teach in medical schools. The introduction of a clinical loading for staff who are qualified veterinary clinicians would go some way towards improving the capacity of universities to attract and retain clinical teaching and research staff.

In both medicine and nursing the government also provides a further per capita amount to universities to enable them to contribute to the cost of clinical placements in public or private hospitals. The amount is not great (\$1133 per medical student and \$1065 per nursing student) and there is considerable argument between university medical schools and public health providers about the adequacy of the contribution, but there is at least a recognition of the need to provide additional funding for clinical training. In addition, and in order to encourage clinical placements in General Practice, medical practitioners prepared to take trainees are also paid an additional fee per clinical session to recognise the time they spend in training.

In the case of regional medical education, the government has been prepared to support clinical places in private medical clinics through the provision of significant capital funding to assist medical practices to create appropriate space for trainees and the payment of an additional sessional rate to medical practitioners to recognise the time lost in seeing patients while they are also teaching clinical trainees. This has been done largely because state and federal governments has been conscious of the need to encourage medical practitioners to work in regional areas, which are typically under-served.

The situation is not dissimilar for veterinary practices, which are also suffering the same workforce stresses that make them reluctant to take clinical student trainees. However, the case for retaining veterinary surgeons in regional areas is equally strong. The government should be encouraged to develop similar arrangements for rural and regional veterinary clinical practices by providing additional funding to universities to support those practices that are prepared to deliver clinical training to their veterinary science students.

Veterinary education, to be of international standard, must be research-led. At the same time, like much of veterinary education, research facilities and support for research are very expensive for universities to provide and maintain. In assessing the funding of research in more general terms and veterinary research in particular, there is a need to recognise the true economic costs of research, so that competitive grants are sufficient to support the research project without the need for cross-subsidisation from other areas of the university in question.

2. Veterinary Training in Regional Universities

Veterinary courses in regional universities suffer from the same problems as regional universities as a whole, but exacerbated by the fact that recruiting veterinary specialists is even more difficult than recruiting academic staff in general. Veterinary professionals working in metropolitan areas have access to better facilities and research opportunities. Those that are required to teach in a university course also need to be more highly qualified and a significant proportion are expected to have specialist training, which means they need to be given a higher level of professional scope and satisfaction. They tend to be in fields where non-metropolitan settings are a disadvantage (eg, small animal surgery, diagnostic imaging).

Veterinary specialists need case load in order to derive their income and develop their careers, whether that be in academia or private practice. The high degree of specialisation within the veterinary profession now means that specialists in most fields tend to be restricted to the large metropolitan centres where they can generate sufficient case load. For example, there are a number of veterinary specialist centres in Melbourne and Sydney, but only one in Adelaide. The only

registered veterinary specialist in Canberra is a small animal surgeon. There are none outside the major state capital cities.

As another example, there is one veterinary diagnostic imaging specialist practice, with two registered specialists, in Sydney. There are already very clear challenges for all Veterinary Schools in Australia to recruit and retain a specialist veterinary radiologist, but the difficulties faced by regional centres with much smaller populations are very large. In the absence of the high case loads that such specialists can command in city practices, attracting and retaining them in regional universities will require additional support. This might include levels of equipment and research opportunities equivalent to those in major veterinary hospitals and the already discussed clinical supplementation of salaries.

At the same time, because there is a more dispersed and smaller professional workforce in regional areas and many practices are small private ones, clinical training needs to use a dispersed model of clinical placements. This is a very expensive means of providing clinical training because both students and supervising academic staff need to travel extensively and provide support for practices in a very widely dispersed area of Australia.

While this university has developed its own facilities for clinical training these suffer from low case loads of horses and small animals, due to smaller human population densities, reducing the potential for cost recovery of clinical facilities.

Training for farm animal veterinary practice is the most expensive component of all veterinary courses. Safety requirements mean that student:staff ratios must be very low and supervision must be individual and close. Clinical training requires driving students to animal production units (farms). The high cost of such training is one reason that some veterinary schools have reduced this component of their courses in recent decades.

3. Veterinary Training at Charles Sturt University

The 2003 Frawley Review of Rural Veterinary Services (para 5.32) found that there was “a shortage of veterinarians in specific, usually more remote and smaller communities and temporary difficulties in other rural locations from time to time. One veterinary employment agency estimates that there are currently between 80 and 190 permanent positions available to be filled in rural mixed practices. The principal agencies reported nearly 400 vacancies in rural Australia over the course of 2001”.

The Report also found (para 5.34) that there were significant additional problems in ensuring continuity of rural veterinary services as existing professionals retired, because it was proving ever more difficult to recruit replacements or for new practitioners to buy existing practices. The Review stated that “...many veterinarians in rural mixed practice are, in terms of their professional practice, in some degrees of distress. There is also clearly a real shortage in many rural areas of veterinarians with experience in treating production animals and the competence and confidence in dealing with them.”

Frawley’s comments are still being endorsed anecdotally and directly from many practitioners who still cannot find good employee veterinarians and/or retain them after they have gained some clinical experience. The major difficulty reported appears to be around selling practices – retiring practitioners may have to close their practices if they cannot sell to younger veterinarians, with considerable consequences for the region’s economy.

Frawley did not contemplate the creation of additional veterinary schools to meet the shortages identified. However, CSU decided that it needed to act to create a regional school with a focus on production veterinary science that might have a greater likelihood of success in attracting students from rural areas and that it should do all it could to ensure that they were retained in rural areas when they moved into practice.

The University began its veterinary science course with no Federal or State Government financial assistance because there was an evident need for a regional veterinary school to address the problem faced by rural communities and CSU had experience and success in tackling the problem. The University already offered courses in equine science, animal production and agriculture and had considerable regional support for its new school. It recognised both the lack of veterinary surgeons to meet regional needs and the likelihood that there would be a continuing requirement to train veterinarians in a regional environment which might encourage them to continue to work in that environment. These factors persuaded the University that it should invest in the School.

In keeping with these precepts, the University adopted a different student selection method. Based on some evidence from a longitudinal study in Queensland, which seemed to indicate that students with farm backgrounds or regional backgrounds were more likely to return to rural practice, it decided to focus its selection criteria on factors additional to the traditional UAI or ENTER score, which was the predominant selection criterion used by the existing schools.

As a result, the University selects students predominantly from rural Australia or from those who have demonstrated an interest in the rural livestock industries and rural communities through a written application and interview. These selection elements still require that entering students have excellent academic results, generally requiring a UAI score exceeding 90. A typical veterinary school selecting only on UAI would have scores of 98 or higher, favouring a significantly different demographic compared to the one attracted to CSU¹.

This selection method provides great opportunities for rural students, which did not exist before this course began, as well as selecting a type of student with particular aptitude, knowledge and interest directed at farm animals. We believe that the combination of criteria used to select students leads to graduates who are likely to remain in these areas of significant economic importance to Australia.

We are training students specifically for rural practice and for careers assisting Australia's livestock industries in all veterinary capacities. This bias in training defines the curriculum in our programme. Nevertheless, our students must be as well trained in companion animal veterinary science as graduates of other schools because of (a) the requirements for school accreditation, (b) individual registration, and (c) the need to provide companion animal services in rural practice in order to provide financial sustainability to the practices.

Our course is delivered in a rural city. Students spend their formative years in this and other rural communities, forming lifelong friendships in rural communities and coming to understand the particular nature of rural society. These graduates will feel more at home in rural centres than metropolitan centres for the whole of their professional lives. The success of this approach "Train in the country, from the country, for the country" has had demonstrated success in the CSU Pharmacy programme, which preceded the veterinary course by about 8 years.

The veterinary course at CSU started in response to a clear need for more veterinarians to take up work in rural practices, to buy rural practices from retiring practitioners, and to gain experience of

¹ Heath, T.J., Hyams, J, Baguley and J, Abbott, K.A. (2006) "Effect of Different Methods of Selection on the Background, Attitudes and Career Paths of First Year Veterinary Students", *Australian Veterinary Journal*, 84.6.

rural veterinary science to encourage them to stay in those regions to seek to address the major shortage of veterinarians in rural practice. We believe that our approach to both training and selection will play a key part in addressing the shortage of veterinarians in rural practice. However, this can only be maintained if there is an adequate level of funding support that recognises the particular needs of rural training and the additional costs of doing this well. It is an argument that has received much attention for medicine and dentistry, but it now needs to be extended to veterinary science because the economic and productivity issues associated with having a strong veterinary workforce in regional areas are significant and ultimately crucial to Australia's agricultural industries and the associated export income.

An example of the importance of supporting rural veterinary provision is the shortage of veterinary specialists in production animal pathobiology. This has significant risks for the biosecurity of our nation, as evidenced by the recent equine influenza outbreak. The CSU course is addressing this through its commitment to construct a \$9 million diagnostic laboratory in 2008-9.

4. Conclusion

Australia's rural and agricultural sector continues to provide significant economic benefits for the country, through both the production of food and the generation of export income. This industry is highly dependent for its maintenance and protection on the support of high quality veterinary services, which must be available close to the source of the industry. The delivery of training and research in a regional university like CSU, which has taken seriously the need to ensure that the profession is both well trained, highly focused on production and committed to creating and retaining professionals for the long term, is of fundamental importance. If this is further integrated with a strong research focus that aims to find practical solutions to industry problems, regional business and economies will also be enhanced.

I therefore suggest that the new structures for veterinary education, training and research should recognise the additional costs of delivering courses, especially in regional universities and that they need to be supported by adequate levels of funding for clinical training. The system could be the same as for rural and remote medicine, with universities receiving additional funding per student in the final two clinical years of training to be used to support rural clinics and universities in delivering the appropriate level of clinical training.

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