Submission to the Senate Community Affairs Committee inquiry into the factors affecting the supply of health services and medical professionals in rural areas

Summary

This submission, made by The University of Western Australia (UWA), focuses on the training of medical students within rural and remote communities, which is provided by the Rural Clinical School of Western Australia. The submission also provides information on the UWA Faculty of Medicine, Dentistry and Health Science's Rural Student Recruitment program. Section D of the Terms of Reference, 'any other related matters' is addressed within the submission. Overall it is argued that the successful recruitment of rural students in addition to the provision of medical training programs allowing for integration with rural and remote communities, are amongst the best ways to securing an adequate and stable cohort of health care and medical professionals for rural and remote areas.

What is the situation in terms of health care professionals working within rural and remote communities?

It has long been acknowledged that within Australia there exists a shortage of doctors willing to work in rural and remote locations. The Rural Doctors Association of Australia (RDAA) showed[1] the national figures for GPs and specialists on a full-time effective basis (FTE) per 100,000 people differs significantly between densely and sparsely populated areas:

Locale	GPs per 100,000 people	Specialists per 100,000
Major cities	97.0	122
Inner regional	83.1	56
Outer regional	74.2	38
Remote	68.2	16
Very remote	47.1	16

The RDAA notes that the GP proceduralist, that is GPs who can offer procedural services such as obstetrics, anaesthetics and surgery, as well as the medical generalist, are important to both rural and remote communities due to the fact that limited populations cannot viably support practitioners of sub-specialties. However, it has been observed that since 2002, there has bee a decline in the proportion of rural practitioners willing to provide procedural services (RDAA Factsheet, p.2). The RDAA suggest that there is a trend towards sub-specialisation within the medical

[1] RDAA data source: Australian Government Department of Health and Ageing (DoHA), 2008. Report on the Audit of Health Workforce in Rural and Regional Australia, April 2008.

workforce, which leads to a situation in which there are fewer doctors available to become rural generalists or GPs (RDAA Factsheet, p.2).

Why is there a shortage of Doctors willing to work in Rural and Remote Areas?

The difficulty in finding healthcare professionals to fill positions in rural and remote areas is not a problem unique to Australia. In a review article examining the difficulty faced globally in ensuring adequate provision of healthcare professionals to rural and remote communities, Wilson et.al, noted that:

> It is generally accepted that the tertiary hospital-based model of medical education exposes students mainly (even exclusively) to curative and specialised care, reducing the likelihood of a future generalist career and rural practice…. Retrospective questionnaire-driven surveys indicate that theoretical course content had very little influence in the decision of rural doctors to enter rural practice. Rural field residencies (immersion) together with adequate local guidance and supervision seems to exercise the greatest influence.

In their recent study of the issues behind the recruitment and retention of GPs in rural and remote settings, Kamalakanthan and Jackson undertook a series of in-depth interviews with a variety of stakeholders. The authors found that there were a variety of incentives that could be utilised to encourage GPs to take up a position outside the metropolitan areas. These factors include:

- Nation-wide incentives for rural and remote work, as opposed to state-by-state incentives;
- Part-payment of indemnity insurance;
- Fast, streamlined and flexible training;
- Undertaking study in rural settings to acquire adequate rural skills; and
- Bonding students to the rural pathway.

Over the last decade, in an effort to provide students with an opportunity to engage in study in a rural setting, the Rural Clinical School of Western Australia (RCSWA) has developed an increasingly successful program for medical students in Western Australia.

Case Study: The Rural Clinical School

Background

The Rural Clinical School was established in 2002 within the Faculty of Medicine, Dentistry, and Health Sciences at The University of Western Australia (UWA). Senior medical students choose spend their entire penultimate academic year in a rural or

remote setting, which, as well as offering excellent educational opportunities, provides for the possibility of real understanding and enthusiasm for life in a rural community and rural practice.

The RCS in WA began with seven students in four towns and has grown steadily since then. In 2011, 76 students are spread across 13 towns "sites", and are supervised and assisted by approximately 60 academic staff and 40 professional and research staff.

In 2007, medical students from the University of Notre Dame Australia's (UNDA) post-graduate medicine program in Fremantle were successfully incorporated into the existing RCS program. The two universities entered into a Joint Agreement to establish The RCSWA – One collaborative rural medical school for the State. Approximately one third of the cohort is made up of UNDA students, while UWA students account for the remaining two thirds. The School is administered through UWA – all staff members are UWA employees, and Notre Dame students are cross-enrolled with UWA. This successful collaboration has enriched the student experience.

The RCSWA takes 25 percent of both Universities' medical student allocation supported by the Department of Education, Employment and Workplace Relations. Students undertake one year of their clinical training in a rural area, as defined by the Australian Standard Geographical Classification – Remote Areas (ASGC-RA) 2-5. In recent years, UNDA cohorts have been about 100 students and UWA about 200. Accordingly, the RCSWA enrols approximately 25 UNDA and about 50 UWA students each year. The actual numbers vary from year to year but for planning purposes the School oversubscribes by a few students to ensure that it meets the targets as students unavoidably withdraw from time to time.

The School's headquarters are in Kalgoorlie and a small urban presence is maintained in the UWA School of Primary, Aboriginal, and Rural Health Care building on the QEII Medical Centre campus in Perth.

The current sites in which the RCSWA operates are: Derby; Broome; Kununurra; Port Hedland; Karratha; Carnarvon; Geraldton; Bunbury; Busselton; Narrogin; Albany; Esperance; and Kalgoorlie. There are between three and ten students at each site depending on the size and capacity of the site. Each site comprises an administrative and teaching building as a base (often a converted house or a shop front in the main street) and separate student accommodation (usually houses near the local hospital). Other equipment, including vehicles, computers, videoconferencing and electronic communication systems, is also provided. As part of the School's contribution to the host communities, attempts are made to buy goods and services locally to the maximum extent possible, and the school tries to always hire local staff.

The sites are widely distributed and relatively small. As WA does not contain large population centres like coastal Queensland and inland NSW and Victoria, the highly distributed model is the only option (see below).

Student Numbers

The table below shows the numbers of students at each site in the relevant years. Table 1 highlights the fact that over the last decade, the number of sites in which the RCSW operates, as well as the intake of students, has expanded considerably.

Table 1 Placement of RCSWA students by locale 2002-10

SITE	ASGC-RA	Definition	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	TOTAL
Kalgoorlie	RA3	Outer Region	3	9	9	9	10	10	10	10	11	10	**91**
Albany	RA3	Outer Region				2	6	8	10	9	11	10	**56**
Broome	RA4	Remote	1	4	6	6	7	8	8	8	8	9	**65**
Bunbury	RA2	Inner Region						10	10	10	11	10	**51**
Busselton	RA2	Inner Region								7	6	5	**18**
Carnarvon	RA4	Remote								3	3	4	**10**
Derby	RA5	Very Remote				3		3	3	3	3	2	**17**
Esperance	RA4	Remote			3	3	3	3	4	3	3	3	**25**
Geraldton	RA3	Outer Region	2	5	7	6	4	9	10	10	9	9	**71**
Karratha	RA4	Remote					3	3	3	3	3	3	**18**
Kununurra	RA4	Remote										3	**3**
Narrogin	RA3	Outer Region						4	4	3	4	3	**18**
Port Hedland	RA4	Remote	1	3	4	4	4	4	5	5	5	5	**40**
TOTAL			**7**	**21**	**29**	**33**	**37**	**62**	**67**	**74**	**77**	**76**	**483**

Activities of the RCSWA

Besides the core classroom and bedside teaching, the students' clinical placements occur mostly at general practices, local hospitals, community and remote clinics, and Approved Medical Specialists (AMSs) or Aboriginal Community Controlled Health Organisations (ACCHOs). Students take every opportunity to participate in any clinical activity – for example they will attend other clinics such as the child health or domestic nursing services, and they will fly out to remote clinics with a visiting specialist or the Royal Flying Doctor Service (RFDS). Whenever there is a specialist in town the students will shadow them and usually have some direct teaching scheduled into the specialist's timetable.

The ability to develop a more holistic approach to medical practice is appreciated by the students, and the student feedback of the placement is very positive:

"The surgeons are willing to let us do anything under their supervision. They would let us intubate all day, or close them up at the end of the operation. We get to drive the scope if they're doing gall bladders. In Emergency we get to do all the drips, taking bloods, giving kids nebulisers and if you go Friday or Saturday night it's just flat out stitching people up in a live setting. Procedurally, I have put in chest tubes and done a lot of stuff I didn't expect to do and we get called to do it. They will ring us up and say, "I was wondering if one of the students would like to come down and put a tube in." That is fantastic."

An RCSWA student

"You also get the opportunity to follow up patients. I saw a young man in general practice and then sent him for a few investigations at the hospital. We decided it was probably appendicitis so we admitted him and I went and assisted with the surgery. All this in the space of several hours, and then I looked after him in follow up."

An RCSWA student

Integration with the Local Community

In a recent submission to Health Workforce Australia (HWA), the Australian Rural Health Education Network (ARHEN) highlights the fact there is a 'complex array of programs and agencies that are involved in responding to the rural health workforce shortage'. ARHEN argues that often these program and agencies tend to work in isolation and that as a result there are 'missed opportunities at the local and regional level for coordinated action that optimises the effectiveness of these programs' (ARHEN submission p.4). The RCSWA has made a concerted effort to ensure that the local health community and visiting healthcare specialists are integrated into the activities of the School.

Within the locales in which the RCSWA operate, the health community is routinely generous with their time as they are very happy to have the School in town. Of course the academics are also responsible for the formal assessment and monitoring of progress of each student, as well as their pastoral care and mentoring and guidance in general.

In terms of impact of the RCSWA within the communities in which it operates, it is clear that School's presence provides a range of physical infrastructure, social infrastructure, economic capital, and a host of capacity building influences. The RCSWA buildings are in regular use by the health community sometimes for clinical meetings, for example, that the local academics have initiated, and sometimes simply as a physical space for other health related organisations to conduct their educational programs or meetings. Indeed in some of the buildings at the larger sites

there is actually a booking system for rooms and it appears there is always an activity of one kind or another going on. Whenever it is appropriate the students may participate in these activities. The RCSWA is a leading example of the way in which universities can make positive contributions to rural and remote communities, and the School has made a concerted effort to ensure that each site is viewed as part of the community in which it operates.

Curriculum

Within the RCSWA, a number of parameters are required to be met in relation to the placement of students, namely:

a) *ensure (as far as possible) the student's physical safety and comfort*
   Students are housed in high-quality accommodation generally owned and maintained by the RCSWA. These buildings are generally located close to the local hospital for safe access at night, and are provided with security systems appropriate to the local circumstance. Risk management principles are applied to all activities in which student safety may be of concern.

b) *the placement does not impose undue financial hardship on the student*
   Accommodation is provided at no cost for the year. Students with partners who choose to live outside RCSWA accommodation are provided with a bursary of equivalent value. All students receive financial support to move a reasonable quantity of personal effects and their private vehicle is transported to and from their site. Students are provided with two return airfares to their site per year, if air travel is available, as it is safer than long distance driving. One fare is used to get to and from the site at the start and end of the year, and the other allows the student to return to undertake options during the midyear four-week option period.

c) *the program is culturally appropriate (where applicable)*
   Cultural competence and safety is applicable in all sites and all students receive cultural safety training comprising one whole day during the orientation period in the urban centre and then further locally specific training once they reach their site.

d) *the teaching is to a standard at least equivalent to that provided to students in metropolitan settings; and*

e) *the program must be consistent with Australian Medical Council requirements for medical curriculum*
   In 2010, the UWA Faculty of Medicine, Dentistry and Health Sciences was reviewed by the Australian Medical Council (AMC) as part of its regular schedule. The AMC Director's Report noted that:

   > The RCSWA shares end of year examinations with the main campus in Perth including simultaneous OSCEs at multiple sites. Benchmarking of examiners occurs across sites and between urban and rural examiners.

> Workplace assessments in the RCSWA are also benchmarked across sites using marker pairs. The RCSWA has an Assessment Committee that considers data from each assessment (AMC Director's Report 2010).

The content and learning outcomes of the RCSWA program are identical to those of the UWA Medical School in Perth, but are delivered in a significantly different way. In particular, the RCSWA process is characterised by longitudinal integration (in lieu of rotating specialty clerkships,) and opportunistic learning embedded in the community. RCSWA students are taught and assessed to the same rigorous standards as urban students and write the same end of year exams and identical clinical exams. Their academic performance is indistinguishable from their counterparts in Perth.

The RCSWA is locally and nationally acclaimed. In 2007 the School received the nationally prestigious Carrick Award for University Teaching in the category of "Curriculum Innovation". This award confirms the RCSWA's academic credentials. In 2009 the School received the WA Premier's Award, essentially for social impact, which was considered a major endorsement of the RCSWA's contribution to the communities in which it operates.

Rural Student Recruitment

In a 2003 article for the Medical Journal of Australia (MJA), Laven et.al., revealed the results of their national study on the factors influencing where GPs worked, particularly those in rural locations. The study found that 'GPs who have spent any time living and studying in a rural location are more likely to be practicing in a rural location. Those whose partners have also lived and studied for any period of time in a rural location are six times as likely to become rural GPs than those with no rural background' (Laven et.al., 2003, p.77). The authors note:

> The decision of whether or not to work in a rural area is a multifactorial one and the influence of a multifaceted rural backgrounds is only one part of this complex decision making process.

The University of Western Australia recognises that medical students with a rural background are more likely to be interested in working in rural and remote areas their urban counterparts. There is a significant level of recruitment of students from rural and remote locales within the UWA medical student cohort. From 2005, UWA has consistently met the target of attracting at least 25 percent of the DEEWR supported medical student cohort from rural/remote backgrounds. This remained the case in 2010, despite ASGC-RA (2-5) replacing RRMA (3-7).

The University of Western Australia's highly regarded Rural Student Recruitment (RCR) program demonstrates best practice and is predicated on rural high school visits with follow-up support which includes travel and accommodation to an urban "camp", travel and accommodation to UMAT and selection interviews, support for

transition to the metropolitan area particularly through first year, and then on-going support throughout the student years. On-going social events keep each year group together as a cohort, which then often leads to friendships and mutual support. The RSR support comprises not only financial assistance but active, intentional and on-going personal engagement with each student.

The salary and associated costs, particularly rural and remote travel and accommodation costs, of the RSR officer and program has in the past been paid from the Rural Undergraduate Support and Coordination (RUSC) grant and will continue to be supported under the new The Rural Clinical Training and Support (RCTS) arrangements. Again because of distance, travel and accommodation costs are not insubstantial, but this is an excellent program, which receives enormously positive feedback from the regions. In particular the parents of students who have been supported in this way regularly applaud the program. An interesting aspect of the program is the fact that RCSWA students play an important role by participating in the high school workshops when they are happening at an RCSWA site. This involvement of "young doctors" adds appreciably to the 'cool' factor of the workshops and improves outcomes.

Long Term Results

As can be seen in Table 2, the introduction of the RCSWA, has led to medical students not only spending part of their time at university located in rural and remote locations, but has also lead to an increase in time spent within those locations during the formative years of training within the various colleges, post graduation. We note that it can take a considerable amount of time for doctors to complete their specialisation training, which is often interrupted by time away due to maternity leave, or international travel. Additionally, a number of the colleges vary in the amount of rural training including in their programs. Thus, many graduates are unable to spend 52 weeks within rural and remote location as they must undertake training in urban areas. That said, as a result of survey data, it is clear that one of the key successes of the RCSWA has been in graduates developing an appreciation of the life in rural and remote communities, as well as an intent to spend at least some of their working lives outside of urban areas.

Table 2 Count of Graduates spending 4 weeks or more in Rural or Remote Locations

		2003	2004	2005	2006	2007	2008	2009	2010	2011
Year	Cohort									
2002	7	Yr 6	4	5	2	1	4	4 (3=52wks)	3 (2=52wks)	2
2003	21		Yr 6	11	11 (1=52wks)	6 (1=52wks)	7 (1=52wks)	5 (2=52wks)	6 (4=52wks)	4 (2=52wks)
2004	29			Yr 6	9	9 (2=52wks)	7 (3=52wks)	7	6 (1=52wks)	1 (1=52wks)
2005	33				Yr 6	8	12 (2=52wks)	9 (3=52wks)	9 (1=52wks)	4 (3=52wks)
2006	37					Yr 6	9 (1=52wks)	16 (3=52wks)	7 (1=52wks)	9 (6=52wks)
2007	62						Yr 6	24 (5=52wks)	12	19
2008	67							Yr 6	27 (1=52wks)	7
2009	74								Yr 6	15 (1=52ws)
2010	77									Yr 6
2011	76									

Note - 52 week terms did not necessarily represent the same individual from one year to the next

Not all graduates were contactable

Colleges vary in how much rural training is available

Concluding Remarks

Rouke argues that:

> Increasing the proportion of medical students who come from a rural background, providing positive rural learning experiences in medical school and specific rural residency/vocational training programmes will increase the number of graduating physicians with the interest, knowledge and skills for rural practice (Rouke, 2010, p.296).

Through the RCSWA and the Rural Student Recruitment program, the University of Western Australia is engaged in increasing the number of medical practitioners both willing and skilled enough to work in rural and remote locales. The key to establishing successful pathways for medical students is ensuring that the quality of the training provided is not only of the standard received in urban teaching environments, but that students attain a holistic experience within the community in which they are placed. Over the past decade the RCSWA has worked tirelessly to provide students with the best experience possible during their placement year.

The Rural Student Recruitment program has also been successful at UWA. Developing such a program has taken a significant number of years and requires substantial resources, particularly in light of the distances that must be travelled and

the cost of flying to and finding accommodation within remote locations in Western Australia.

The University of Western Australia is convinced that high quality programs, which allow for integration within the local community, are the best way to not only recruit rural students, but to provide urban students with the possibility of experiencing the life of a medical professional in a rural or remote community. Such programs are expensive in terms of staff requirements, the movement of staff and students to the sites, preparation of the sites themselves and general costs. Ensuring these programs remain properly funded and providing resources to allow for their expansion would be an excellent step towards securing an adequate supply of health care professionals for rural and remote communities into the future.

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