

“The year in Dubbo was fantastic. Being able to walk to hospital in a minute and to class in 10 seconds made life very easy, especially for after hours/ on call shifts. The staff at the hospital were great, and we were able to get to know the senior clinicians well due to the small teams and attending outreach clinics.

“I decided that for internship I would prefer to work in a smaller hospital where, if I was making a phone call in the middle of the night, I would probably know the person on the other end of the phone. I like that you get a more general exposure to medicine and surgery, instead of the sub specialties in the tertiary hospitals. I also like the friendly feel of a country hospital and that in a country town nothing is more than five minutes away.”

Marianne Dowsett, Dubbo medical student 2011, Orange intern 2012



MAKING A DIFFERENCE IN RURAL HEALTH

One of the little known achievements of Sydney Medical School over the past decade has been its growing strength in rural health education and research. Each year, its four major centres – the School of Rural Health in Dubbo and Orange, the University Department of Rural Health in Broken Hill and the University Centre for Rural Health in Lismore – provide clinical training for hundreds of Sydney medical students and growing numbers of students in other fields including nursing and allied health. Research activity has risen and rural-based researchers again this year secured significant funds in NHMRC and other grants.

2011 a year of milestones

“The most important message is that Sydney Medical School’s rural Departments and Schools have a brilliant future,” said Professor Ben Freedman, Deputy Dean of Sydney Medical School and whose portfolio includes responsibility for rural health.

“They have already achieved the education and research goals which were part of the vision of their founders. The next decade will see them expand and evolve, and make a growing contribution to the quality of the rural health and medical workforce, and to the quality of care available outside the major metropolitan centres.”

This year – 2011 – has been a year of milestones for Sydney Medical School’s rural centres.

In Broken Hill, it is 15 years since funds were committed to establish a new University Department of Rural Health as part of the election campaign which swept John Howard into Government. This year is 10 years since the official launch of the Dubbo Clinical School although students did not arrive until the following year. The Orange campus also began operating in 2002. The University Centre of Rural Health North Coast, previously University Department of Rural Health, also celebrated 10 years this year.

The School of Rural Health and both the Broken Hill and Lismore University Departments of Rural Health were established to enable medical and health students to undertake part of their clinical training in rural locations, encouraging them to return to rural practice after graduation.

A decade on, the signs are positive. Students who participate in the extended places are almost unfailingly positive about their experiences and are increasingly opting for internships in rural centres.

Research in rural locations has also been increasing and over the past several years, rural research groups have fared extremely well in national research grants.

Last year, the ARCHER study into adolescent health, being run out of Dubbo and Orange, secured nearly \$1 million from the NHMRC and was one of the largest grants awarded in that round.

Professor Lesley Barclay, Director of the University Centre of Rural Health, is chief investigator on a \$480,000 grant from the latest round of NHMRC awards. The project is looking at regional maternity services, and aims to develop and test an index that calculates the appropriate level of maternity service for populations under 25,000 in Australia.

In Broken Hill, the UDRH is a key participant in the recently launched Centre For Research Excellence in Rural and Remote Primary Health Care. (The CRE was awarded \$2.5 million and is a collaboration between Monash University School of Rural Health, the Centre for Remote Health in Alice Springs, and the UDRH in Broken Hill.) Professor David Lyle and Associate Professor David Perkins in Broken Hill are looking at a range of factors including access to services and effective models of care. The outcome, they believe, will assist consumers, providers and policymakers to plan and evaluate provision of care.

“There have been and most certainly will continue to be challenges, but what has been shown is that if the universities, health providers and the communities work together, a great deal can be achieved,” Professor Freedman said. “It has been inspiring to see what has been achieved to date, and we are confident that the future will be just as bright.”



Broken Hill

By Beth Quinlivan

That Broken Hill was the first to secure a new University Department of Rural Health was due in no small part to the efforts of David Lyle and Clyde Thomson. Both were then, and have remained, passionate advocates for better health education and career opportunities in rural and remote centres.

When the University of Sydney Department of Rural Health in Broken Hill was officially opened in 1997, it was the first of 11 such departments around Australia to be funded as part of a broader commonwealth strategy to boost the rural health and medical workforce by improving opportunities for students to gain rural clinical experience.

Professor David Lyle, a public health physician, had moved to Broken Hill in 1995 to establish a rural training unit - it was this unit which became a prototype for the new University Department. He has been head of the UDRH and the University of Sydney's Department of Rural Health in Broken Hill since 1997, and the primary driver of its decade and a half of growth and achievements.

Clyde Thomson's support for improving remote health education came via the Royal Flying Doctor Service. Having taken a job as an RFDS pilot in Broken Hill in 1974, expecting to remain for two years, he stayed, working in various roles until he was appointed chief executive of the South Eastern Section in 1986. Under his direction, the RFDS has become a great deal more than the legendary "swoop and scoop" emergency service. By the mid-1990s, it was already a major provider of primary care in towns and communities around Broken Hill and like other remote health care providers, faced an ongoing problem of attracting and retaining quality staff.

The establishment of the UDRH in Broken Hill has been one of the notable success stories of rural health education. In recent years, it has gone from strength to strength: student numbers have more than doubled in the past three years, new clinical training facilities are under construction and research is expanding. Its links in the remote community and with health care providers – including the local health district, Maari Maa Aboriginal

Health Corporation and the RFDS – are stronger than ever. It continues to offer leadership in the sector, including blazing a trail with innovative new clinical programs which provide students with community-based training opportunities that equip them well for future practice at the same time as providing important local services.

EVOLUTION

"It has been a story of growth and evolution," said David Lyle of the 14 years as a UDRH and 17 years of education and training in Broken Hill. Major milestones included linking with Dubbo Clinical School in 2002, providing clinical placements for nursing students for the first time in 2007 and allied health students in 2009. Along the way, there has been a move from short term to longer term clinical placements, including for medical students who can now spend a year based in Broken Hill. More recently, there has been a significant growth in student numbers with students drawn from an increasingly wide number of institutions.

In 2009, the UDRH provided clinical placements for 910 student weeks. In 2010, the student weeks had nearly doubled at 1750. In 2011, they will provide 2100 student weeks of clinical training with further significant rises expected in 2012.

Much of the growth is coming from students in other disciplines – nursing, pharmacy, social work, and allied health students studying physiotherapy, speech pathology, exercise physiology, occupational therapy – rather than medicine. But the reason the UDRH has been able to provide clinical training for such a significantly larger group is because clinical places are being found in non-traditional settings, including aged care centres and schools, where students gain real hands on experience as well as provide much needed help for the town's stretched health services.

"We call it service learning and it allows us to accommodate many more students than if we were relying on hospital-based clinics or outpatient services," David Lyle says. "What we are doing is getting students engaged in projects which are practical and useful in this community, and which prepare them well for professional life."

"Win win" is a phrase that is well overused in modern management jargon but in the case of the community learning programs in Broken Hill, there are real benefits on both sides.

For example, for the past two years speech pathology students coming to Broken Hill for six week blocks have run very effective screening programs in local primary



schools, identifying children who needed follow-up treatment. In a town where speech pathologists are thin on the ground, schools and parents have been delighted that the children were being tested and difficulties identified. For many children, this has been the first time they have been routinely tested and many previously undiagnosed conditions have been identified. A clinical supervisor manages the work, but the students take on a greater role managing their programs than is usual.

“For the students, this was the first time that they had been given responsibility and they did a great job. When they come here, they are in the final stages of their studies and we are of the view that these experiences will assist them settling into their role after they graduate.”

Other student groups have participated in similar community-based programs – pharmacy students last year worked with high school students on campaigns to raise awareness about common health problems including asthma. Social work students have provided access to in-demand social work services for a community with high needs in both Government and non-Government sectors.

David Lyle attributes a great deal of the success of the program to Deb Jones, director of UDRH’s Primary Health Care Group. A Broken Hill local, it is her understanding of the needs of, and connections in, the community that have enabled them to work so effectively with schools and other organisations. “Deb is the true inspiration for the program and really has done a fantastic job, we could not have achieved what we have without her.”

GETTING THEM BACK

Attracting doctors and other health professionals remains a perennial challenge in most rural and remote centres. In Sydney Medical School’s other rural clinical training centres - Lismore, Dubbo and Orange - there is increasing anecdotal evidence that students who spend some of their time in the rural clinical training will stay in the country for internships, residency and where possible, specialty training. In this year’s internship allocations, Orange, Dubbo and Lismore had many more applications than available positions and medical students who had previously been in the towns were among the most enthusiastic to return.

One of the challenges in Broken Hill is that until now, postgraduate training opportunities have been limited.

“We are here to achieve workforce outcomes and that requires providing opportunities for postgraduate as well as undergraduate training, and for interesting and varied

careers,” he says.

David Lyle says they are looking at a number of options including negotiating with NSW Health to provide internship positions at Broken Hill Hospital, and positions for second year prevocational medical trainees in remote communities.

It is here that both he and Clyde Thomson believe the link with the RFDS could be used to greater benefit. “The RFDS is important because it is a major provider of health services in the communities and towns outside Broken Hill,” he said.

Clyde Thomson is certain that the connection between the RFDS and the University Department of Rural Health will in future involve a significantly greater training component.

“The profile of the health services we provide is changing,” Clyde Thomson says. Alongside the retrieval and air ambulance services, the RFDS provides regular primary care clinics in Wilcannia, Menindee, White Cliffs and many other small centres around Broken Hill, where they work in conjunction with local health services. Future RFDS clinics will not be all doctors and nurses but allied health specialists such as speech pathologists and physiotherapists.

“We need to get the training component right,” he says. He sees the future as teams delivering services on the ground, including RFDS rural registrars and/or “rural generalist” physicians, medical and other students, and allied health professionals.

“We can’t deliver a strong primary care service without a close relationship with the university – any more than we could without a strong relationship with state and federal governments, and Aboriginal health organisations.”

“What we can do is provide opportunities to students which are not available in the big metropolitan teaching hospitals. Once students experience that, retention rates will improve and we will see more of them back here.”

David Lyle and Clyde Thomson have been friends and colleagues for many years – and they agree on many things. They agree that networks and communities are critical, especially in the remote community in which they live. They agree that the key to future success is strong partnerships in education, research and community care, and that good training and career opportunities are essential if rural health is going to attract committed and high quality individuals away from the bigger centres. After 17 years working together, they are still making a difference. *radius*

Clyde Thomson (left) executive director RFDS South Eastern Section, David Lyle (right) head of the University of Sydney’s Department of Rural Health in Broken Hill.



School of Rural Health, Dubbo.

Lismore

In August this year, the Lismore-based University Centre for Rural Health celebrated 10 years of University of Sydney-supported activity on the north coast of NSW. Professor Lesley Barclay, Director of the UCRH, reviews a decade in which the Centre has evolved into a significant regional base, recognised for quality health and medical training and research.

After a lengthy battle to secure funds, the Northern Rivers University Department of Rural Health opened in mid 2002 in shared office space with the Northern Rivers Area Health Service. Professor John Beard was seconded in March 2002 as Head of Department. John, now Director of the Department of Ageing and Life Course at World Health Organisation in Geneva, and academics appointed early on, focussed on rural health programs and public health research and education.

We now have 66 staff. Over half of these are clinicians, many on fractional appointments. Most of these teach the students we place. The administrative staff place our students and help us manage finances and human resources attached to the 60 grants or tender contracts that subsidise our Commonwealth allocated finances. We are located across Lismore, Grafton and Murwillumbah.

WHAT HAVE WE ACHIEVED?

TEACHING

Evidence of our rapid growth is student numbers. In 2010 we supervised 623 short term and 45 long term students. In addition we have provided facilities, and at times teaching support, for 11,200 hours of professional development for practising health professionals across three sites. The total numbers of students - particularly in medicine - is holding steady at the moment, as we have reached capacity and wish to extend the number of our long stay students. We have, however, been delighted to add dental students to the wide range of disciplines we support. The most important measure of our effectiveness is the number of our graduates returning to a rural workforce. In 2012, five interns appointed at Lismore have rural experience through the UCRH.

RESEARCH

Our early research successes contributed to us receiving NSW Health Infrastructure support with colleagues in Broken Hill, Moree and

Orange. This funding established the Australian Rural Health Research Collaboration (ARHRC) - a collaboration funded again in 2010.

Over the decade our UCRH researchers have undertaken significant roles in 10 ARC funded grants and six NHMRC funded grants as Chief Investigators. Currently our staff lead or participate as Chief Investigators in five Category 1 grants.

In 2010 UCRH researchers generated: 33 peer reviewed publications, four book chapters and reports, two edited books with numerous key note addresses and invitations to speak at international and national conferences. Over 2010 and 2011 we have built strong partnerships with Canadian scholars in rural health research and appear on each other's studies.

We now provide primary supervision to 13 PhD students. Three PhD students are on NHMRC scholarships with another supported full time by scholarship by the Clinical Excellence Committee. We supervise one NHMRC post doctoral fellow and a senior NHMRC Research Fellow at the Menzies Research School in Darwin.

LEADERSHIP

We encourage strong two way interaction with health at all levels; as joint appointments but also in leadership roles in health systems and services directly. Staff are members of the Local Health District Board and Safety and Quality committee. We have a Board position on the Regional Development Authority where health is strongly represented. The standing and excellence of our staff is reflected in a number of our senior staff who also lead not only locally and nationally but internationally in academic work in environmental health, maternity care, rural and remote health service design, Cognitive Behavioural Therapy and Indigenous health and research methods.

LOOKING FORWARD - FUTURE EXPANSIONS

A review of our structure was undertaken in 2009-10 and in consultation with our partners and funding agency, we have established a new consolidated identity; the University Centre for Rural Health (North Coast).

In July this year, in collaboration with the Northern New South Wales Local Health District we were awarded substantial funding from Health Workforce Australia to provide student accommodation and clinical education facilities at Ballina Hospital. Accommodation in both Grafton and Murwillumbah will also be extended to provide an additional 10 beds and funding to transform the newly acquired blood bank site in Lismore into a clinical education centre.

The vision of establishing a strong academic presence and building an applied scholarly climate in rural health care has been achieved. We are continuing to contribute to an evolving climate of practice improvement, workforce development and our research is changing services. It is a pleasure and privilege to be part of these endeavours.



Left: Sydney Medical School students outside the Orange Base Hospital.
Right: Entrance to the Orange Base Hospital.



Dubbo and Orange

In 2012, it will be 10 years since its first students arrived in Dubbo for a six week stint of rural medicine. Associate Dean and Head of the School of Rural Health, Professor Tony Brown, says the seeds were sown for the new School well before students arrived. The students arrival, though, was also the start of a decade of growth, consolidation and establishing firm partnerships in the region.

The Dubbo Clinical School was officially launched in 2001, with the first eight students arriving in 2002. The Orange campus also began operating in 2002. The name changed to School of Rural Health in 2004 and the purpose built Dubbo Campus officially opened in August that year. The new facilities provided teaching and administrative facilities, as well as accommodation for 25 students. In early 2009, accommodation for a further 10 students was added. Despite this, we are still always short!

CHALLENGES

The early challenges involved buildings and space. Initially the clinical school in Dubbo was housed in hospital buildings. Students had rooms in a hospital building, as did staff. Now we have a teaching and administration complex and a number of units for student accommodation. In Orange, we developed facilities in demountable buildings because it was foreshadowed that a new hospital would be built on the Bloomfield campus 6km away. This new state of the art hospital opened in March 2011 and at that time we moved our operations to an old ward on the campus. We are currently refurbishing part of this and seeking funding for more and for student accommodation on this site.

One of the early issues was that if we were to be able to teach medical students in a rural location we would need to be able to support them with lectures from metropolitan clinical schools. This has meant a considerable investment in IT infrastructure long before there was any talk of the NBN. Bushnet, a series of microwave links between Dubbo, Orange and Bathurst and main campus, provide the ability to video link all the sites and metro clinical schools. The SRH used these links to join meetings and committees as well and led to improvements in interconnectivity between all parts of the Faculty. IT remains vital but Bushnet has been replaced by a connection to AARNET.

EDUCATION...AND RESEARCH FOR THE FUTURE

Our primary *raison d'être* is to provide long-term placements for medical students. Our funding under the Department of Health and Ageing Rural Clinical School program and now the Rural Clinical Training and Support program obliges us to take 25% of the domestic medical students to have one year of clinical training in the country. Students of the Sydney Medical Program come to us in Stage 3 of the course and spend either their third or fourth year in either Dubbo or Orange. This has meant that we have had to be able to deliver all of the required terms in stage 3 including all the specialty blocks not just the medical and surgical ones.

We think we do this education well. Very few of our students fail and it is common for our students to be represented among the top students in the year. A different measure of our success is that our students come back to rural locations as interns. For example for the year 4 2011 cohort who will be interns in 2012, Dubbo Base Hospital will take 5 rural preferential interns and 4 of those will be SRH students. Orange Base Hospital will take 14 rural preferential interns and 7 will be SRH students. Some other SRH students are likely to return on rotation from metro hospitals.

A change in Department of Health and Ageing funding parameters under the new RCTS program has meant that we will need to address some wider rural issues in the Sydney Medical Program, including short-term placements. These will be exciting challenges.

While we have concentrated on teaching we have not neglected research. We remain a fledgling research group but in 2010 along with others we won an NHMRC grant for a large study of rural adolescents (ARCHER). We are also doing some work around overweight and obese young adult males who seem a rather neglected group. What of the future? Rural health is still in need of support and enhancement but the current political climate offers some encouragement. Our plan is to strengthen our current teaching of medical students, to advocate for more vertical integration of training and more rurally based postgraduate education and training, to work with other disciplines.

A FANTASTIC STUDENT EXPERIENCE

"I originally decided to spend my final year in Orange so that I could be in an environment that would allow me to focus on my medical studies, and to gain an insight into regional medicine and country living. Deciding to spend my final year of medical school in Orange has been the best decision I've made during my studies. From day 1, you are made to feel welcome. The staff at the clinical school are fantastic and attend to any and every query you have, related to university matters or not. Also, the teaching provided is second to none. Having a limited number of students allows for a small student to tutor ratio; thus, for the majority of my time in Orange, I have been the only medical student on the hospital medical team or in private rooms, giving a fantastic educational experience."
Stephen Duma, Orange medical student 2011.