

COMMENTARY

University rural health clubs: nurturing the future Australian rural workforce

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ABSTRACT

Context: Australian university rural health clubs (RHC) are part of a national strategy to address the rural health workforce shortage. The student members of these clubs throughout Australia comprise the National Rural Health Network (NRHN). The NRHN is a multidisciplinary body representing medical, nursing and allied health students, aiming to increase the health workforce and health outcomes for rural and remote Australians. The NRHN and its constituent clubs run a variety of activities to promote rural careers to both school-aged and university students. These have included events at local, state and national levels.

Issues: The purpose of the present article is to describe the roles and activities of RHC and the NRHN as they aim to contribute towards developing a sustainable rural workforce. Key features of RHC and the NRHN are: (1) providing positive rural experiences; (2) peer promotion of rural health; (3) personal and professional development; (4) providing a volunteer workforce for rural health initiatives; and (5) cross-disciplinary interaction. The NRHN is currently investigating methods to quantify the impact of the RHC on the career choices of potential rural health professionals.

Lessons learned: The NRHN and its constituent clubs are student-driven initiatives occupying a unique place in addressing the rural workforce shortage. Although little formal evidence exists for their success, the issues raised in this article illustrate their importance and broader benefits in this field.

Key words: health science students, pre-graduation strategies, positive experience, workforce.



Context

Australian university rural health clubs (RHC) have existed since the early 1990s and currently number 19 clubs representing approximately 5000 university health science students across Australia (Fig 1). In 1995, the National Rural Health Network (NRHN)¹ was founded as an overarching body consisting of representatives from each club, as well as an executive committee. Each RHC regularly reports to the NRHN Council. The NRHN is funded by the Commonwealth Department of Health and Ageing (DoHA) through an external auspicing body, the Australian Rural and Remote Workforce Agencies Group (ARRWAG), and is a member body of the National Rural Health Alliance (NRHA).

Rural health clubs and the NRHN can be considered to have two broad aims:

1. To provide positive rural experiences for medical, nursing and allied health students with the hope of encouraging rural practice in the future.
2. To raise awareness of rural health issues among students and the wider community.

University RHC conduct numerous and diverse activities, including trips to rural locations, information and scholarship sessions, practical workshops, discussion forums, health promotion activities and social events². For those clubs with a combination of nursing, allied health and medical membership, these activities are often cross-disciplinary in nature. Collaborative activities with university departments of rural health, Divisions of General Practice, medical rural clinical schools (RCS), Aboriginal medical services, community organisations and rural health professionals are also undertaken.

The NRHN enables communication and organisation of events at different universities and provides external representation on a national level. The cross-disciplinary and

inter-university nature of the NRHN and its member clubs enables cooperation with many national rural health bodies and communication of issues, ideas and initiatives across a large portion of Australia's potential future rural health workforce. This is an approach applicable both to Australia and other countries. The present article discusses the activities and role of the NRHN and RHC as they pertain to encouraging future rural practice among pre-graduation medical and health science students. It was prepared on behalf of the NRHN after considering contributions from all Australian RHC.

Issue

RHC and other student-oriented initiatives

The NRHN occupies a unique role among the range of initiatives aimed at developing a sustainable Australian rural health workforce (Table 1). Of these initiatives, a number are targeted at undergraduate health students, with the majority being focused solely on those studying medicine. Rural health clubs and the NRHN complement many of these initiatives, but also provide additional and unique benefits.

The schemes relying on bonded student places to increase the rural health workforce have attracted significant debate^{3,4} but will not be further discussed here.

Rural Australia Undergraduate Medical Scholarships (RAMUS), administered by NRHA, as well as the John Flynn Scholarship Scheme (JFSS) administered by the Australian College of Rural and Remote Medicine (ACRRM) have anecdotally been successful in generating interest and providing constructive rural experiences for medical students over scholarship periods of several years. Eligibility for a RAMUS is dependent on rural background, which is known to be associated with future rural medical practice⁵. It is also a requirement of the JFSS, the nursing and allied health scholarships and RAMUS holders that they be members of their RHC. The benefits to these students are



that they become involved in an organisation of like-minded people providing support, as well as the opportunity to develop professional skills and contacts. The benefits to the RHC are that they obtain a significant number of students participating in and facilitating club activities. Since the work of the RHC include activities promoting JFSS and RAMUS, benefits also accrue for these schemes themselves.

Perhaps in recognition of its success, the RAMUS has been expanded into nursing and allied health fields. The Rural Allied Health Undergraduate Scholarship scheme, like the RAMUS, provides financial assistance to students from a rural background. Momentum for this issue was generated at the student-hosted National Undergraduate Rural Health Conference (NURHC)⁶ with the NRHN also contributing to lobbying as a member of the NRHA.

Collaboration with RCS is another area where RHC can contribute to aspects of the national rural health strategy. For example, prior to their rural rotation, all medical students at the University of Queensland spend one week at their respective RCS for orientation. In addition to the formal curriculum during the day, social and other informal activities are hosted by the RHC for both members and non-members. The collective aim of all these activities is to provide a welcoming atmosphere for students unfamiliar with rural living so that they have a positive experience and consider it as a future option. Other interactions between clubs and RCS include information evenings held by the RHC to promote rural placements and RCS staff support of club activities.

A submission to the Department of Education, Science and Training (DEST) by ARRWAG emphasised the valuable academic experience provided by RCS, and commented on the role of promoting health careers through positive experiences⁷. This submission, to which the NRHN contributed, clearly identified the important role RHC play in making RCS a success.

National forums

Aside from local activities run by RHC, the NRHN provides opportunities for interaction among the clubs, through national forums. The NURHC was an event organised by students from RHC under the NRHN with eight NURHC being held between 1995 and 2004. In 2007 the NRHN Forum was instead held alongside the 9th National Rural Health Conference. Such events provided unique opportunities for club members to engage with rural health issues at a national level. These forums incorporated student presentations among academic presentations, clinical skills sessions, forums for discussion and debate on prominent issues, a lively social program, and a pervasive atmosphere of passion for rural health. Students are known as a dynamic and enthusiastic population group, and nowhere is this more evident and able to be harnessed than at student conferences. The professional development and enthusiasm fostered at these conferences played a vital role in encouraging and enabling students to take on more responsibilities within their local RHC. Therefore, although the highly sought-after delegate places were limited in number (totalling 6% of the NRHN membership), the post-conference motivation and enthusiasm of NURHC attendees was greatly beneficial to the future running of RHC and their events. The last NURHC in 2004 was held in Tanunda, South Australia.

An extensive independent review of the NRHN and NURHC was conducted in 2005⁸ on behalf of DoHA. Of the NRHN members surveyed who had been to one or more NURHC, more than 94% indicated that attending had strengthened their networks, knowledge and understanding with respect to rural and remote health, and of these 89% had also shared their motivation with the broader student community. The conference is likely to have a positive influence on the future rural workforce as evidenced by the 91% of respondents who agreed that their motivation and commitment to work in rural or remote Australia had been strengthened by attending a NURHC. Feedback from the 2007 NRHN Forum mirrored these results.

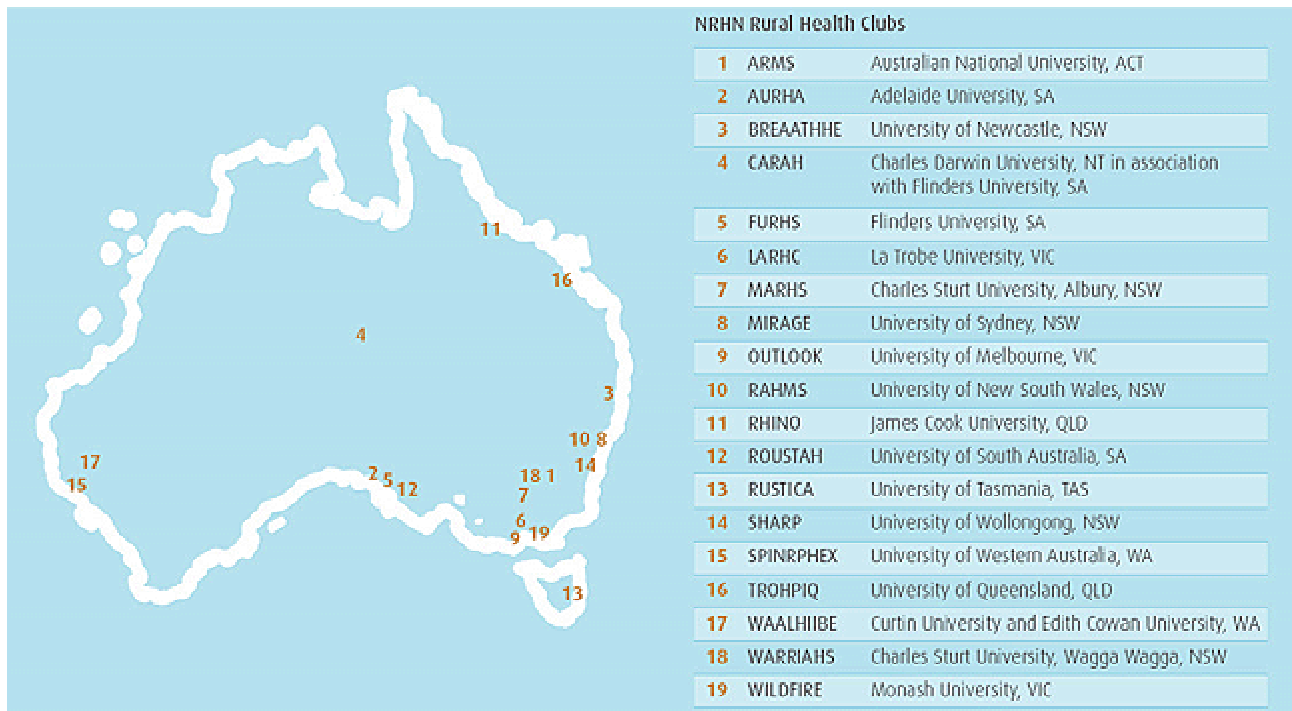


Figure 1: Australian university rural health clubs comprising the National Rural Health Network (Used with permission of the National Rural Health Network, South Yarra, Victoria).

In the absence of formally funded national events in 2005 and 2006, several RHC held state-based rural health forums (Fig 2) in order to generate and foster enthusiasm for rural health issues, and to enable provision of opportunities for education and professional development of their members⁹. It is the opinion of the NRHN that this level of exposure is crucial for nurturing the future leaders in rural health care.

Key features of rural health clubs

In the context of the national rural health strategy, RHC occupy a unique niche that enables particularly effective execution of their aims and objectives:

- providing positive rural experiences
- fostering peer promotion of rural health
- promoting personal and professional development

- providing a volunteer workforce for rural health initiatives
- promoting cross-disciplinary interaction.

Positive rural experiences: The provision of affirming experiences is a rational concept in addressing the shortage of Australian rural health professionals. It is a focus of university RHC and the NRHN. It is necessary to target future health professionals early to encourage an informed and positive perspective on future rural practice. Rural health clubs aim to do this as well as to equip students as they graduate to become health practitioners.



Table 1: Australian rural health recruitment and retention strategies

Strategy	Description and Comments
Medical Rural Bonded Scholarships (MRBS)	Offers a place in medical school with a relatively substantial financial incentive (\$21 818 pa) in return for contractually bonded rural service for 6 years after obtaining specialist qualification.
Medical Rural Bonded Support Scheme	Administered by the Australian College of Rural and Remote Medicine. Aims to provide peer and mentor support to MRB scholars, as well as providing opportunities to attend conferences for their academia, social and networking benefits.
State bonded schemes: Queensland Health Rural Scholarship Scheme, and NSW Rural Resident Medical Officer Cadetship	Both these schemes offer financial incentives to students currently enrolled in medical courses. The amount of remuneration and length of bonded period are both less than the MRBS.
Rural Australia Medical Undergraduate Scholarships	This \$10 000 pa scholarship is offered to students of rural background studying medicine. Students are required to maintain contact and activities with a rural mentor, and develop annual self-directed learning plans. Students are required to be members of their university RHC.
Rural Allied Health Undergraduate Scholarships	This \$10 000 pa scholarship is offered to students of rural background undertaking studies in an allied health discipline. Students are required to be members of their university RHC. Administered by Services for Australian Rural and Remote Allied Health, in partnership with the National Rural Health Alliance.
Commonwealth Undergraduate Remote and Rural Nursing Scholarship Scheme	This \$10 000 pa scholarship is for remote and rural nursing students. It also provides a range of support measures to remote and rural nursing students, including additional financial assistance, mentor programs and Indigenous cultural awareness training.
John Flynn Scholarship Scheme	This scholarship aims to provide positive rural experiences by sending a medical student for a 2 week placement in the same community each year for 4 years. Students are required to be members of their university RHC.
Rural health clubs (RHC)	Rural health clubs consist of 5000 students enrolled in medical, nursing and allied health courses. The RHC aim to promote rural health careers, rural health issues and rural lifestyle to members and fellow university students. Represented at a national level by the National Rural Health Network.
Rural clinical schools	Encourages and enables 25% of Australian medical students to undertake long-term clinical training placements in rural areas.

MRB, Medical rural bonded; NSW, New South Wales.



In 2005, SPINRPHEX of Western Australia ran their inaugural Rural Health Conference, which was attended by over 100 members. The conference included keynote speeches from a range of rural health professionals, cross-cultural training and multidisciplinary clinical skills sessions. Attendees felt that such a conference was helpful in ‘...develop[ing] our ideas and skills to make us better nurses, dentists and doctors in the future’.

The South Australian Undergraduate Rural Health Forum, *Campfire '05*, was conducted by students from the three South Australian rural health clubs. *Campfire '05* was held in the southern Flinders Ranges and attended by 60 students and health professionals from various disciplines. This forum also included speeches, clinical skills sessions and student presentations, as well as discussion sessions to debate key rural health issues.

Figure 2: State-based rural health forums.

It is uncommon for students participating in activities and the management of clubs to have negative experiences. By contrast, many students express surprise at the benefits and awareness provided by such participation. It has been noted that positive experiences can influence personal choice of rural practice as well as inspire other university students to follow a similar path¹⁰.

A common misconception is that graduating students must start rural practice immediately after leaving university. In reality, many new graduates are rightfully concerned about issues such as family, travel and career. These must all be considered when deciding where to practise, and it is not unreasonable for graduates to decide that rural practice is not right for them at that particular time. However, affirming experiences gained during university years may lead them towards rural practice for perhaps a few months or at a later point in their careers. If not, they will still be well-informed members of the health workforce, able to speak from their own experience and advocate in an informed manner for their colleagues in rural Australia.

Peer promotion and support:

Among all the rural health strategies, a unique attribute of RHC and the NRHN is peer promotion. Because RHC are run by fellow students, there is an atmosphere that is encouraging, non-threatening and enjoyable. Activities combine promotional, educational and social components designed by students to be attractive and informative for their peers (Fig 3).

In addition to fostering the enthusiasm of students from a rural background or those with a particular interest in rural issues, RHC also welcome students who have had no contact or previous desire to work in rural areas and expose them to rural issues. For example, following a recent University of Sydney Rural High School Visit (RHSV) in New South Wales which lasted several days, one psychology student with no previous rural involvement remarked on how her preconceptions of isolation and perceived lack of interesting activities available in rural areas had been changed for the better.

Providing a network of students interested in rural issues is also of great value to students of rural origin who are in a minority in most health courses. In this situation RHC can provide support to the student throughout their transition to university life, as well as use their interest to promote rural health to others. Hearing from other students about the opportunities to work in rural health can influence students to become more involved. Activities such as JFSS information evenings and student presentations at NURHC enable RHC members to share ideas and inspire others. At NURHC and in other rural health forums, hearing the student presentations has been consistently reported as the highlight of the program.



Many rural health clubs conduct trips to rural areas, which include opportunities for students to practise clinical skills with rural health professionals, and to have positive exposure to rural life

- One of the many such trips was described by a first year medical student in ARMS, the rural health club of Australian National University:
'At the invitation of the Bungendore Medical Centre, approximately 30 years 1 and 2 students from the medicine course at ANU in Canberra had a taste of rural medicine. The day was organised by Dr Y who was assisted by doctors from Bungendore, Braidwood and Queanbeyan NSW. Volunteers from the community and rural fire brigade became victims of various emergency scenarios: Bungendore had had a bad morning with a car accident and a pedestrian thrown through a shop front window and another person collapsed outside the pub! It was a great experience to practise and learn more skills, to talk with doctors about practising in rural areas and to experience a little of the charms of Bungendore as well'. Among other activities, students took part in CPR training and were addressed by a rural GP.

Figure 3: Rural health clubs' clinical skills trips.

Personal and professional development: Personal and professional development is an important and underlying element in the functioning of RHC and the NRHN. Management of the NRHN and its constituent clubs is performed by a diverse group of students representing a broad range of experience and healthcare backgrounds. Participation in committees exposes students to formal committee operation, budgeting, communication and organisational activities. Specific leadership and management skills, such as media training and strategic planning, have been incorporated into a number of meetings held by the NRHN. This is particularly useful given the rural health context in which this experience is achieved.

Attendance and active participation in conferences of national significance is encouraged and supported by the NRHN and its constituent clubs, in order to provide an additional forum for skill development and for the development of a broader perspective of rural health issues. Most RHC offer financial and logistical support for students to attend conferences, while the NRHN administers funding for medical, nursing and allied-health students wishing to attend conferences of national significance. This allows students to pursue often specific fields of interest, such as the dietetics student who attended the Dietitians Association of Australia national conference via this scheme. A common trend noted is the increasing participation and confidence displayed by students as they attend conferences and

network with health professionals. After attending a rural conference in Tanunda, one medical student remarked that it all appeared so daunting until she saw her own friends conversing with academic and clinical delegates, as well as delivering podium presentations.

The NRHN regularly deals with peak Australian health organisations and, therefore, affords its committee members useful experience in this area. Examples include providing representation on committees from the Australian Rural Health Education Network, NRHA and ACCRRM, among numerous others. This enables the development of a broad perspective on rural health issues and of the political aspects of rural health. Such exposure provides opportunities not only to increase the rural workforce, but it also equips future health professionals with the acumen and awareness to advocate for the needs of their communities.

These students may well develop into the future leaders of Australia's rural healthcare sector, and may also deal with the international community. Indeed, several past NRHN committee members have been selected to take part in the Australian National Youth Roundtable¹¹ which fosters the ideal of leadership. Notably, a former NRHN representative to the NRHA, Richard Sager, is now the project officer for the Remote Indigenous Stores and Takeaways Project, a federally funded initiative to improve food safety in remote areas of the Northern Territory¹², while former NRHN Chair



Dr James Fitzpatrick won the Young Australian of the Year award in 2001 and began the True Blue Dreaming youth mentoring program¹³.

Providing a volunteer workforce: Rural Health Clubs are actively involved in promoting the various Australian rural health initiatives (Table 1). This activity of RHC is acknowledged by the administrators of such schemes who recognise the essential role this plays in their success. For example, ACRRM has noted an increase in the number of applications for the JFSS since engaging with the RHC (ACRRM, pers. comm., 2006) while the NRHA has also benefited from close communication and promotion. A number of other organisations were also present at the various NURHC in order to promote their activities and to interact with students.

The RHSV program involves trips by club members to rural high schools to discuss health careers with the school students, including Indigenous students. They provide information in an informal, interactive, and relevant manner to senior school students to encourage them to undertake tertiary health science study. Evidence from both Australia and overseas demonstrates that university students of rural origin are more likely than their contemporaries of non-rural origin to choose rural practice after graduation¹⁴. A further benefit is for the university students themselves: their participation in the program exposes them to rural communities and gives them the opportunity to undertake public speaking and other leadership activities.

The NRHN is a national sponsor of the children's health and lifestyle festival *CrocFest*. At these festivals, which are held throughout Australia, various stalls are manned by RHC members (Fig 4). The activities and information available at these stalls promote health and health careers to the thousands of primary and secondary school students attending the festivals.

Rural Health Clubs also have a role in advocating for appropriate curriculum content and delivery. In the past they have acted as agents of change within medical schools by

contributing to curriculum reform. With the success of this reform, especially in medical schools, the focus on support for students has strengthened¹⁵. Elsewhere, the NRHN contribution to the 2006 DEST review of medical education also reinforced the importance and value of rural clinical experience and of quality education regarding rural and Indigenous health issues⁷.

Multidisciplinary interaction

The environment provided by the NRHN and constituent clubs is one of multidisciplinary awareness and collaboration. Events and activities are conducted mostly to cater for students studying a wide range of health disciplines, while preparation and coordination of these activities is often undertaken by similarly multi-disciplinary teams.

Committees are often structured to ensure adequate representation of different health disciplines and to allow equitable opinion-sharing and decision-making opportunities. For example, the NRHN has specific nursing and allied health representatives, in addition to those with medical and Aboriginal and Torres Strait Islander portfolios.

The multidisciplinary nature of the NRHN and its constituent clubs provides an opportunity for future rural health professionals to learn about the roles of other disciplines and about teamwork within the rural health setting. The importance of multidisciplinary collaboration within tertiary education has been discussed elsewhere¹⁶. The operational model of the NRHN is particularly relevant due to its early exposure of university students to working in such an environment and has been recognised as such¹⁷.



- Rural health clubs (RHC) across Australia organise stalls at *CrocFestivals* around the country to promote health and health careers to Indigenous and non-Indigenous students in primary and secondary school. Interactive activities run by RHC members at these stalls include plastering, emergency scenarios, healthy eating promotion and exercise activities.
- Representatives of MIRAGE at the University of Sydney attended a Careers Expo for high school students in Nowra. As described by one of the RHC members:
'About 500 students passed by our booth, the vast majority in year 10. Being fairly young, we could instil in them a desire for rural health before they became set in their career choices. Physiotherapy and nutrition were the clear favourites and we were able to get many students to consider a rural path by telling them of the many scholarships and opportunities available to them. Our interactive table with 'Terri-the-torso' model was also popular, allowing students to examine each others' eyes, ears and vital signs'.

Figure 4: Rural health careers promotion activities.

Lessons Learned

Examining outcomes

Although there is anecdotal evidence of the positive impact of RHC⁸, there exists little formal evidence of the impact of RHC on addressing the Australian rural health workforce shortage. This is a problem encountered and acknowledged by many recruitment and retention strategies and further research is necessary to clarify the impact of these interventions¹⁸.

The NRHN has demonstrated an awareness of this issue through involvement in the Medical Deans Australia and New Zealand (formerly Council of Deans of Australian Medical Schools – CDAMS) Medical Student Outcomes Database and longitudinal tracking project. This project aims to record the career paths taken by all Australian medical students commencing their studies from 2006. Over time, reports will aim to include data useful to all organisations working in the area of workforce recruitment and retention¹⁹.

The NRHN has also recognised the importance of self-evaluation and is investigating ways to examine the impact it has in addressing the rural health workforce shortage. The tools that have been implemented so far include a strategic plan, national forum evaluation and establishment of an outcomes monitoring working party. The strategic plan was developed from a formal government evaluation in 2005

which resulted in significant reforms being undertaken. This strategic plan was completed within the three-year timeframe allocated, besides some necessary exceptions, and a new plan will be created shortly. The recent 2007 NRHN Forum was evaluated in survey form by participants. The data analysis, currently being undertaken, has revealed a generally positive opinion of the forum with several areas noted for improvement. An outcomes monitoring working party has been established by the NRHN to advance possible evaluative tools. Since outcomes will be monitored for thousands of students across a wide range of health disciplines, it is anticipated that the information gathered will be a valuable resource over time.

Although the involvement of full-time university students is a strength of the organisation, there are some difficulties associated with being a national movement involving a broad range of disciplines and several time zones. In particular, this can affect communication between members of the NRHN Council. Students also encounter issues such as clinical placements, other curriculum activities, and competing extracurricular interests on a daily basis²⁰. Accordingly, their time for attending NRHN matters may be limited which can result in progress delays at times. In addition, the high turnover of students similarly leads to a loss of continuity which can potentially further affect NRHN projects and hinder communication.



The NRHN review in 2005, found that communication often ceased at the NRHN Council level, leaving many RHC members actually unaware of the NRHN itself as a national body⁸. The NRHN subsequently attempted to counter this by increasing production of relevant publications and improve dissemination of information among members. A completely new website was recently launched and a dramatic increase in site hits was noted, compared with the old website. Unfortunately, website hits have decreased since then, while distribution of NRHN material still remains a problem.

It should be noted that the NRHN strives to actively support the RHC in planning and implementing RHC activities and projects. Nevertheless, event calendars and the events themselves are predominantly planned and implemented autonomously by the RHC. In this regard, the role of the NRHN is less obvious but still achieves its goals by virtue of the contribution provided by the RHC themselves.

Given this, the activity of the NRHN as a whole is considerable, involving thousands of students across Australia who are also able to contact and influence other members of the university and school communities. Benefits including personal and professional development and contact at state and national levels are, at times, limited to a small proportion of NRHN members⁸. These are primarily students involved in the NRHN Council and its various committees and activities, although attempts are being made at both RHC and NRHN levels to encourage participation of as many members as possible. There is an ongoing debate concerning whether resources should be targeted towards a smaller number of students with potentially greater individual benefits, or broadly directed at a larger number of students with smaller individual benefits. The NRHN is responsible for maximising benefits of its operations although little formal evidence currently exists to provide direction for NRHN and RHC operations.

Conclusion

The benefits of harnessing motivated students for rural health career promotion and future recruitment are intuitive

but understudied. Further evidence is required to specifically ascertain the long-term outcomes of the activities of RHC in this regard. The NRHN and student involvement in RHC helps to provide affirmative rural exposure and their own personal development opportunities. Such student initiatives should be supported for the substantial role they play in fostering an appreciation of rural health and potentially contributing to a sustainable rural health workforce.

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References

1. National Rural Health Network. *National Rural Health Network*. Available: <http://www.nrhn.org.au> (Accessed 30 March 2007).
2. Hays R. The University of Sydney Rural Careers Project. *Australian Journal of Rural Health* 1993; **1**: 23-25.
3. Australian Medical Students' Association. *AMSA policy*. Available: <http://www.amsa.org.au/about-policy.php> (Accessed 30 March 2007).
4. Australian Medical Association. *AMA Rural Reference Group formally rejects bonded medical places*. Available: <http://www.ama.com.au/web.nsf/doc/WEEN-6P24E7> (Accessed 30 March 2007).



5. Australian Medical Workforce Advisory Committee. Doctors in vocational training: rural background and rural practice intentions. *Australian Journal of Rural Health* 2005; **13**: 14-20.
6. Anon. What people want - delivery of health services in rural and remote Australia. In: JV Turner (Ed.). In: *Proceedings, 8th National Undergraduate Rural Health Conference*. 28 September-4 October 2004; Tanunda, Australia. Toowoomba: National Rural Health Network, 2006.
7. Australian Rural and Remote Workforce Agencies Group. *DEST submission*. Melbourne: Australian Rural and Remote Workforce Agencies Group, 2006.
8. Rintoul D. *Evaluation of the National Rural Health Network and the National Undergraduate Rural Health Conference. Report for the Australian Government Department of Health and Ageing*. Canberra: Urbis Keys Young, 2005.
9. National Rural Health Alliance. SPINRPHEX Conference. *Partyline* 2005; **24**:10.
10. Wilkinson D, Birks J, Davies L, Margolis S, Baker P. Preliminary evidence from Queensland that rural clinical schools have a positive impact on rural intern choices. *Rural and Remote Health* **4**: 340. (Online) 2004. Available: www.rrh.org.au (Accessed 28 June 2007).
11. Commonwealth Department of Family and Community Services. *The National Youth Roundtable*. Available: <http://www.thesource.gov.au/involve/NYR/Default.asp> (Accessed 30 March 2007).
12. National Rural Health Alliance. *Providing fresh food in remote Indigenous communities*. Available: <http://nrha.ruralhealth.org.au/publications/?IntContId=60&IntCatId=6> (Accessed 30 March 2007).
13. Western Australian Centre for Rural and Remote Medicine. *True blue dreaming*. Available: <http://www.wacrrm.uwa.edu.au/etc/page.cfm/PID/90/SID/6> (Accessed 30 March 2007).
14. Dunbabin J, Levitt L. Rural origin and rural medical exposure: their impact on the rural and remote medical workforce in Australia. *Rural and Remote Health* **3**: 212. (Online) 2003. Available: www.rrh.org.au (Accessed 28 June 2007).
15. Kamien M. Rural student clubs and the social responsibility of medical schools. *Australian Journal of Rural Health* 1996; **4**: 237-241.
16. McNair R. Breaking down the silos: Interprofessional education and interprofessionalism for an effective rural health care workforce. In: L Fitzpatrick, G Gregory (Eds). *Proceedings, 8th National Rural Health Conference*. 10-13 March 2005; Alice Springs, Australia. Canberra, ACT: National Rural Health Alliance, 2005.
17. McNicholl M. REFA - better together. In: L Fitzpatrick, G Gregory (Eds). *Proceedings, 8th National Rural Health Conference*. 10-13 March 2005; Alice Springs, Australia. Canberra, ACT: National Rural Health Alliance, 2005.
18. Playford D, Larson A, Wheatland B. Going country: rural student placement factors associated with future rural employment in nursing and allied health. *Australian Journal of Rural Health* 2006; **14**: 14-19.
19. Medical Deans Australia and New Zealand. *Medical Schools Outcomes Database project. CDAMS*. Available: <http://www.medicaldeans.org.au/projects.html#topic1> (Accessed 30 March 2007).
20. Law DW. Exhaustion in university students and the effect of coursework involvement. *Journal of American College Health* 2007; **55**: 239-245.