



Can training reduce the rural workforce shortage?



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Commonwealth figures¹ indicate that the number of general practitioners per 100 000 head of population in remote Australia is half the number in metropolitan Australia, while in rural Australia (outside the larger regional centres) the ratio is less than two-thirds. The rural GP shortage exists in an environment in which mortality rates are 15% higher for rural men and 9% higher for rural women than their urban counterparts.²

Despite the findings of the 2001 BEACH report that the differences between rural and metropolitan practice were fewer than those found by Britt et al in 1993, there remain significant differences.^{3,4} In particular, procedural work was more frequent both in rural and regional general practice than in metropolitan practice. Operations were conducted by about one-third of GPs in small and large regional areas compared to 16% in metropolitan areas.³ In small rural areas, 8% of GPs provided anaesthetic services while this was rare in large rural and metropolitan centres. While 11% of metropolitan GPs recorded item numbers for obstetric services, these numbers rose to 23% in large rural areas and 32% in small rural areas.⁴

What do rural GPs want?

Strasser⁵ found that variety of clinical practice is significant among a range of reasons for choosing rural general practice. Similarly, Lawrance⁶ found that multiskilling and variety of medicine and procedural practice were second and fourth highest in a ranking of 21 items that characterised rural and remote practice for rural GPs. Research by Hays et al⁷ in Queensland and by Kamien⁸ in Western

Australia found that loss of the rich variety of medical practice, particularly in procedural disciplines, is a contributory factor in the departure of GPs from rural locations. The type of medical practice that attracts GPs to rural practice seems to be a major factor in recruitment and retention.

What do rural patients want?

Rural patients expect to have access to anaesthetic, obstetric, minor surgical and other minor procedural services without having to engage in expensive and traumatic separations from family and friends in distant regional or metropolitan hospitals. They also expect their GPs to be able to deliver these services locally, without unnecessary referral to distant specialists or hospitals.⁹

What type of training?

Experience shows that provision of specific training in rural and remote general practice skills does result in higher recruitment and retention of general practice registrars in rural and remote practice once they have completed training. But postgraduate vocational training in isolation does not provide the solution.

Start them young

Research in North America, northern Europe and Australia shows convincingly that rural exposure in the undergraduate years is also a strong predictor of entering rural general practice. The most commonly cited example is the WAMI (Washington, Wyoming, Alaska, Montana, Idaho) program established by the University of Washington in 1971. The first 7 years of the program¹⁰ saw twice the

number of WAMI graduates (23%) practising outside metro areas than non-WAMI physicians (13%), with 61% of these in the USA equivalent to general practice, compared to 35% for the norm. The decentralised approach to this rural exposure forms the basis for the regionalisation of general practice vocational training that has experienced an acceleration over the past few years with the commonwealth government's implementation of the Australian General Practice Training Program, funded through the ministerial GPET authority.

In Australia, Kamien⁸ found that a rural attachment for sixth year medical students with the University of Western Australia had a positive influence on their decision to enter rural practice. Of the 40% who denied influence, 23% were of rural origin and had already made up their minds to 'go bush' anyway. Rolfe et al,¹¹ in a cross sectional survey of 162 graduates from the University of Newcastle medical school between 1982 and 1986, found that exposure to rural practice in the later undergraduate years (particularly their final year) was more of a positive influence than during year 3, which in fact had a negative impact.

Postgraduate years

In Queensland, Hays et al¹² found that non-metropolitan attachments after graduation were particularly useful in influencing a rural career choice for medical graduates with no previous exposure to rural life or medical practice. This finding concurs with research overseas. Pathman et al¹³ have shown that a sense of preparedness for rural practice is

greater among those who spent 3 months or more in rural placement. Participation in rural rotations involving hospital work had better prepared undergraduates for both the type of medicine required, and small town rural life. Interestingly, retention was longer for those who reported feeling better prepared for both rural practice and rural life. This resonates with the positive evaluation experienced in Australia by the commonwealth funded Rural and Remote Area Placement program – a scheme offering medical graduates in post-graduate years (PGY) 1 and 2, 10–13 week rotations in rural hospitals attached to a general practice, currently run by Australian College of Rural Remote Medicine in partnership with The Royal Australian College of General Practitioners (RACGP) and other stakeholders.

Wilkinson et al,¹⁴ in a case control Australia wide study of 2414 GPs stratified by state and territory, rural and urban, found that rural postgraduate training has a greater flow on recruitment and retention impact than undergraduate exposure to rural practice, but the two experiences may not necessarily build upon each other. The postgraduate experience during vocational training, however, is more likely to result in a rural GP than undergraduate experience. Their survey results also support the thesis that students who spend their final year in a rural secondary school are more likely to become rural GPs. It is interesting that Wilkinson et al¹⁴ find that most GPs they surveyed, rural or urban, reported having no rural postgraduate training. Strasser et al¹⁵ found in the 1997 National Rural General Practice Study that GPs involved in teaching in the RACGP training program's rural training stream also have a stronger perception of improvements in their own education than their peers.

Vertical integration

The key to training for rural general practice is vertical integration – adequate exposure to the needed skills and the environment in which they will be used – in undergraduate years, through the prevocational intern years, into vocational training.

In 1993, the RACGP training program introduced specific support for registrars with an interest in rural and/or remote practice with the development of the first advanced rural skills posts (ARSPs), which consisted of 6 or 12 month posts in advanced skills in anaesthetics, obstetrics and surgery. The program of specific educational and training support including an extra 12 months in ARSPs was called the rural training stream (RTS). From 1997, registrars who completed the RTS, including 12 months in ARSPs were awarded a Graduate Diploma in Rural General Practice in addition to their FRACGP.

By 1997 there were advanced rural skills curricula in paediatrics (now child and adolescent health), psychiatry (now mental health), emergency medicine, adult internal medicine and Aboriginal health. From 1997, enrolments in the RACGP's RTS rose from 7% of all registrars enrolled in general practice training to 36% in 2001 – the last year of RTS operation before the introduction of the GPET regionalised training arrangement. Of those enrolled in the RTS, the number who went on to complete advanced rural skills posts rose from 45% to 65% in 2001. A supportive focus on rural training can thus be seen to increase the interest in acquiring the skills necessary for advanced rural practice.

Of the 174 recipients of the Graduate Diploma in Rural General Practice to 2002, 70% are still practising in rural locations (RRMAs 3–7) and 60% are practising in RRMAs 4–7. This compares to a rural recruitment and retention rate of approximately 20% of all general practice registrars (based on 1995–1999 figures). Education and training in rural general practice skills thus has a notable recruitment and retention benefit. In 2003, the RACGP's National Rural Faculty commenced piloting a revised version of the Graduate Diploma in Rural General Practice with GPs who already have their FRACGP.

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References

1. Australian Medical Workforce Advisory Committee. The general practice workforce in Australia, AMWAC Report 2000. Sydney, 2000.

2. Australian Institute of Health and Welfare. Australia's health. Canberra: AGPS, 1996.
3. Britt H, Miller G, Valenti L. It's different in the bush. A comparison of general practice activity in metropolitan and rural areas of Australia. BEACH Report. Australian Institute of Health and Welfare and the University of Sydney, 2001.
4. Britt H, Miles DA, Bridges-Webb C, Neary S, Charles J, Taylor V. A comparison of country and metropolitan general practice. *Med J Aust* 1993;159:(Suppl 1):S9–S64.
5. Strasser RP. Rural general practice in Victoria: the report from a study of the attitudes of Victorian rural general practitioners to country practice and training. Victoria: Monash University Department of Community Medicine, 1992.
6. Lawrance R. The RACGP quality assurance and continuing education needs analysis for rural and remote general practitioners quantitative phase: RHSET Grant Number 188 Supplementary Report. Melbourne: The Royal Australian College of General Practitioners, 1998.
7. Hays B, Veitch PC, Cheers B, Crossland L. Why doctors leave rural practice. *Aust J Rural Health* 1997;5:198–203.
8. Kamien M. Staying in or leaving rural practice: 1996 outcomes of rural doctors' 1986 intentions. *Med J Aust* 1998;169:318–321.
9. Consumers Health Forum of Australia. Cooooooee!! – A call from rural consumers, 1998.
10. Adkins RJ, Anderson GR, Cullen TJ, Myers WW, Newman FS, Schwarz MR. Geographic and specialty distributions of WAMI program participants and nonparticipants. *J Med Educ* 1987;62:810–817.
11. Rolfe IE. Rural origin and rural medical exposure: their impact on the rural and remote medical workforce in Australia. *Rural Remote Health* 2003;212. Available at: <http://rrh.deakin.edu.au>.
12. Hays RB, Nichols A, Wise A, Adkins P, Craig M, Mahoney M. Choosing a rural practice career in Queensland. *Aust J Rural Health* 1995; 3:171–174.
13. Pathman DE, Steiner BD, Jones BD, Konrad TR. 1999. Preparing and retaining physicians through medical education. *Acad Med* 1999;74:810–820.
14. Wilkinson D, Laven G, Pratt N, Beilby J. Impact of undergraduate and postgraduate training, and medical school entry criteria on rural practice among Australian general practitioners: national study of 2414 doctors. *Med Educ* 2003;37:809–814.
15. Strasser R, Kamien M, Hays R. National Rural General Practice Study. Victoria: Monash University Centre for Rural Health, 1997.

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