

Training our future rural medical workforce

We need to provide appropriate, high-quality training in and for rural areas

AUSTRALIA'S MEDICAL WORKFORCE is distributed unevenly — in rural and remote areas, where people have the highest morbidity and mortality rates, there is reduced access to medical services.^{1,2} Not only is there a maldistribution adversely affecting rural and remote areas, but the work of rural and remote general practitioners is more complex than that in metropolitan areas.³ Thus, we need to provide appropriate medical training for these environments, and strategies to increase the rural workforce.

In recent years a suite of initiatives has been introduced to encourage more doctors to choose careers in the bush.⁴ These range from visits to rural high schools promoting medicine as a career, to undergraduate scholarship schemes, through to regionalised general practice training. Rural Australian Medical Undergraduate Scholarships are offered to students from rural areas, and the John Flynn Scholarships are open to all students who express an interest in future rural practice. Both of these foster relationships with rural areas and practitioners. All general practice registrars are now required to work for at least 6 months in a rural area, and there are financial incentives to train in rural areas. Finally, substantial academic infrastructure, in the form of university departments of rural health and rural clinical schools, has been funded.⁵

Will these initiatives have an impact on rural and remote workforce shortages?

Current evidence suggests that rural doctors are more likely to have come from a rural background, to have a partner or spouse with a rural background, to have wanted a career as a general practitioner, and to have undertaken undergraduate and postgraduate training in rural areas.⁶⁻⁸ Doctors who spend more than half their postgraduate training period in rural areas are over 10 times more likely to practise in a rural area.⁹

Most of the initiatives to encourage rural practice have been aimed at medical students, or at doctors after rather than before registration. Historically, most internships have been completed in metropolitan hospitals. The health system needs high technology centres, but are they an appropriate place to apprentice practitioners in their pre-differentiated stage?

In this issue of the Journal, Peach et al (*page 106*)¹⁰ present the results of a study on the eventual place of work of doctors who completed their internships in a regional hospital in Victoria. These doctors were more likely to work as general practitioners in regional Victoria than their contemporaries who completed internships in metropolitan hospitals. Peach et al argue that more internships should be available in regional areas.

This retrospective, case-controlled study shows an association between regional internships and regional careers, but, as the authors acknowledge, this does not prove causation.

Were those who worked in regional Ballarat a self-selected group, already with an interest in life outside the city? Only a prospective study can explore why choices were made, and what aspect of the internship promoted the choice of a career in rural medicine. Was it the social network the doctor made? or the content of medicine in rural areas, with common acute presentations to hospital rather than rare conditions (providing confidence in diagnosis and reducing the “fear” factor of on-call in comparative isolation)? or was it the context, with close relationships with a community making the doctor feel involved and included?

There has always been a tension in postgraduate medical education between providing workforce and furthering the education of doctors in training. Studies have shown that sending general practice registrars to areas of workforce need does not always guarantee a good learning experience, and may generate a desire to rush back to the city at the earliest opportunity. A study in central Australia suggests that, without adequate supervision, the significant learning opportunities available in rural areas are not fully utilised.¹¹ Moreover, the National Female Rural General Practitioners Research Project¹² noted that, while increasing numbers of women are choosing rural general practice, many female general practice registrars in rural areas planned to return to metropolitan areas once they had completed their training.

To solve the rural and remote workforce shortages, we need to provide appropriate, high-quality training *in* rural areas and specifically *for* rural areas. The absolute numbers of medical students with a rural background are still low, so any mechanisms that encourage students from urban backgrounds to work in rural and remote areas are important. However, the intern year needs to provide, in a protected environment, the practical knowledge and skills necessary for a safe standard of medical practice. We need to be sure that regional areas can provide this environment — accredited education, support, assessment, and suitable working conditions.¹³⁻¹⁵

Do we need further evaluative research, as suggested by Peach et al? Yes, we need a prospective cohort study, taking into account the planned Committee of Deans of Australian Medical Schools (CDAMS) Rural Programs Evaluation Project, to examine the impact of both undergraduate and postgraduate rural initiatives on career directions.¹⁶ Should we wait for another 5 or 10 years for the results of this research? No, Australians in rural and remote areas cannot wait. We now have sufficient evidence to be confident that rural and remote training has an impact on subsequent

choice of rural practice, and we know what constitutes an effective training post. Armed with these two pieces of information, we can proceed with increasing the numbers of regional internships. The distribution of internships should better reflect the health needs across Australia.

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1. Australian Institute of Health and Welfare. Medical labour force 2001. Canberra: AIHW, 2003. (National Health Labour Force series no 28.) Available at: www.aihw.gov.au/publications/index.cfm?type=detail&id=9529 (accessed Dec 2003).
2. Johnston G, Wilkinson D. Increasingly inequitable distribution of general practitioners in Australia, 1986-96. *Aust N Z J Public Health* 2001; 25: 66-70.
3. Humphreys JS, Jones JA, Jones MP, et al. The influence of geographical location on the complexity of rural general practice activities. *Med J Aust* 2003; 179: 416-420.
4. Humphreys J, Hegney D, Lipscombe J, et al. Whither rural health? Reviewing a decade of progress in rural health. *Aust J Rural Health* 2002; 10: 2-14.
5. Humphreys JS, Lyle D, Wakerman J, et al. Roles and activities of the Commonwealth Government University Departments of Rural Health. *Aust J Rural Health* 2000; 8: 120-133.
6. Simmons D, Bolitho LE, Phelps GJ, et al. Dispelling the myths about rural consultant physician practice: the Victorian Physicians Survey. *Med J Aust* 2002; 176: 477-481.
7. Brooks RG, Walsh M, Mardon RE, et al. The roles of nature and nurture in recruitment and retention of primary care physicians in rural areas: a review of the literature. *Acad Med* 2002; 77: 790-798.
8. Laven GA, Beilby JJ, Wilkinson D, McElroy HJ. Factors associated with rural practice among Australian-trained general practitioners. *Med J Aust* 2003; 179: 75-79.
9. Wilkinson D, Laven G, Pratt N, Beilby J. Impact of undergraduate and postgraduate rural training, and medical school entry criteria on rural practice among Australian general practitioners: national study of 2414 GPs. *Med Educ* 2003; 37: 809-814.
10. Peach HG, Trembath M, Fensling B. A case for more year-long internships outside metropolitan areas? *Med J Aust* 2004; 180: 106-108.
11. Wearne SM. Pilot study on the factors that influence learning by general practice registrars in central Australia. *Rural Remote Health* [Internet] 2003; 3: 223. Available at: rrh.deakin.edu.au/articles/subviewnew.asp?ArticleID=223 (accessed Dec 2003).
12. Tolhurst H, Lippert N. The National Female Rural General Practitioners Research Project. Final Report, 2003. Newcastle: University of Newcastle, 2003.
13. Daugherty SR, Baldwin DC, Rowley BD. Learning, satisfaction, and mistreatment during medical internship: a national survey of working conditions. *JAMA* 1998; 279: 1194-1199.
14. Roche AM, Sanson-Fisher RW, Cockburn J. Training experiences immediately after medical school. *Med Educ* 1997; 31: 9-16.
15. Boex JR, Leahy PJ. Understanding residents' work: moving beyond counting hours to assessing educational value. *Acad Med* 2003; 78: 939-944.
16. Committee of Deans of Australian Medical Schools Rural Programs Evaluation Project. Description available at: www.cdams.org.au/frmset_about_cdams.htm (accessed Jan 2004). □