

PRELIMINARY REPORT

Decision criteria in health professionals choosing a rural practice setting: development of the Careers in Rural Health Tracking Survey (CIRHTS)

D Schofield¹, J Fuller¹, S Fletcher¹, H Birden¹, S Page¹, K Kostal², S Wagner², L Schultz²

¹Northern Rivers University Department of Rural Health, Lismore, New South Wales, Australia

²Lismore Base Hospital, Lismore, New South Wales, Australia

Submitted: 6 October 2006; *Resubmitted:* 7 March 2007; *Published:* 17 July 2007

Schofield D, Fuller J, Fletcher S, Birden H, Page S, Kostal K, Wagner S, Schultz L

Decision criteria in health professionals choosing a rural practice setting: development of the Careers in Rural Health Tracking Survey (CIRHTS)

Rural and Remote Health 7: 666. (Online), 2007

Available from: <http://www.rrh.org.au>

A B S T R A C T

Introduction: Rural background and training have previously been found to increase the likelihood of rural practice. However, practitioners of many health professions remain in shortage in rural and remote Australia. This study builds on previous work in that it includes medical, nursing and allied health professions, considers the role of the health professional's family in employment decisions, and includes a broader array of factors influencing employment preference and the preferred location of practice. The survey also examines when students might work in a rural area.

Method: The survey was designed after an extensive review of relevant literature and existing surveys, consultation with rural clinicians, and piloting with students. Approximately 500 students per year are anticipated to complete the survey while on placement at the Northern Rivers University Department of Rural Health, New South Wales, Australia, and will be contacted annually for at least 10 years.



Results: The Careers in Rural Health Tracking Survey questions both students and their spouses about employment preferences and related family factors. It contains questions about the size of towns respondents would be willing to work in, and when they would consider working there. It also asks in which regions of Australia students and partners would be prepared to work.

Conclusions: This study aims to expand knowledge of the factors that encourage or discourage health professionals from practising in rural areas. Information about the time dimension in decision-making, areas most likely to face shortages, and about the types of clinicians most likely to work in certain regions, will be crucial when developing initiatives to attract new graduates to rural practice.

Key words: Australia, rural health careers, survey.

Introduction

Limited access to health services remains a significant problem for people living in rural and remote areas of Australia¹⁻⁴. This is in part due to difficulties in attracting and retaining health professionals to rural practice⁵⁻⁹. Schemes devised to improve the recruitment and retention of the rural health workforce^{1-3,5,10-14} will only be successful over the long term if they address the issues that are important to health students in deciding to work in a rural or remote area, and target the students most likely to work in such areas³.

The literature has identified a number of factors which can influence clinicians in making location decisions, including rural background^{1,3,4-6,15-21} or training^{1,3-5,15,17,20,22,23}, spousal background^{1,17,19}, sex^{1,5,24}, specialisation, as well as the availability of professional support and continuing medical education^{3,6,9,16}.

The current study is unique in that it includes all health disciplines, takes account of immediate and extended family factors that impact on employment preferences, and is longitudinal in design. It should enable researchers to follow student decisions about where they commence practice, when and if they practise in a rural area, and the association with factors that are a positive or negative influence on choosing to work in a rural area. It will examine factors that influence both recruitment, as students first move into the workforce and make their location choices, and retention as

the new health professionals become settled in their career over time and make decisions to stay or leave their initial work location. This article takes a similar approach to that of DeWitt and her colleagues²⁵, in that it describes the development and content of the survey tool.

Method

The Careers in Rural Health Tracking Survey (CIRHTS) was developed following a review of relevant literature and existing surveys, consultation with rural clinicians, and piloting a draft instrument with students undergoing rural placements. Some questions (such as questions 13, 14, 17 and 21; Appendix) were taken or modified from previously published questionnaires in order to make the survey comparable with other data sources^{25, 26}.

Approximately 500 students per year are anticipated to complete the survey while on rural placement at the Northern Rivers University Department of Rural Health, New South Wales, Australia. The placement experience can differ among disciplines, universities, and year of study. The CIRHTS, therefore, has the potential to examine the impact of repeated versus one-off, and early versus late exposure to rural practice, and the relationship between length of placement and rural uptake for different health professions.

Once recruited into the study, participants in each cohort will be followed for at least 10 years using an annual questionnaire. Cohorts will consist of students having a rural



placement in a given year, with students continuing to be recruited over the life of the study. Once in the workforce, in future waves of the study, participants will receive a modified version of the survey instrument, which will enable examination of changes in preferences over time, and will also gather information on their experiences as new health professionals, including both work and continuing education issues.

The questionnaire was completed and final ethics approval was received from the University of Sydney Human Research Ethics Committee in 2006.

Results

The CIRHTS survey (Appendix I) questions students in detail on their personal characteristics, family relationships, education and current employment, employment preferences and factors influencing those preferences, and rural background (Fig 1). Because the decision to move to a rural area may also involve a partner or spouse, most items have space for both student and spouse responses.

Understanding the time dimension in a person's decision-making is crucial when developing initiatives to attract clinicians to rural practice. The CIRHTS is unique in that it asks students not only what size towns they would be willing to work in, but also when they might work there. For example, a student could indicate that they would work in a rural community within one year, a major urban centre within 5 years but never overseas.

While previous research has often distinguished only between rural and urban locations, pilot data for the current study suggested that the distinction is not so simple. It could be expected that when students consider practising in a 'rural area', their mental model of 'rural' is not defined as 'outside a capital city', but rather includes a variety of settings, some of which they would be willing to work in and others they would not.

Thus, CIRHTS asks participants to nominate exactly which regions of Australia they would work in and, in so doing, attempts to define areas of Australia in terms of general desirability for practice location, to identify the types of clinicians who are motivated to work in particular regions, and to characterise the positive and negative factors that go into a decision to practise in one area versus another. Maps based on the Australian Bureau of Statistics' *Australian Standard Geographical Classification* of regions²⁷ are provided to assist students and partners in completing this section of the survey.

One important distinction among types of rural areas is the distinction between coastal and inland areas. With more Australians than ever before looking to live and work on the coast²⁸, it is important to know whether this preference is equally reflected by young health professionals. Accordingly, CIRHTS identifies students for whom working near the coast is important, as well as those for whom it is not.

To ascertain the main drivers in student and partner location preferences, participants are asked to quantify on a Likert scale the extent to which certain factors would influence their decision to work in a rural area, from 'strongly discourage' to 'strongly encourage'. Space is also provided for respondents to name any factors that are not already listed.

Conclusions

The CIRHTS has the potential to collect a great deal of information on medical, nursing, and allied health students' regional preferences, and the issues they consider important when considering rural practice. By collecting this information and tracking students over time, it should be possible to identify the specific factors, and respective weights of each factor, that determine whether an individual will be motivated to choose rural practice. This knowledge may be particularly useful for government and industry when developing new schemes so that they provide the greatest incentive for rural practice.

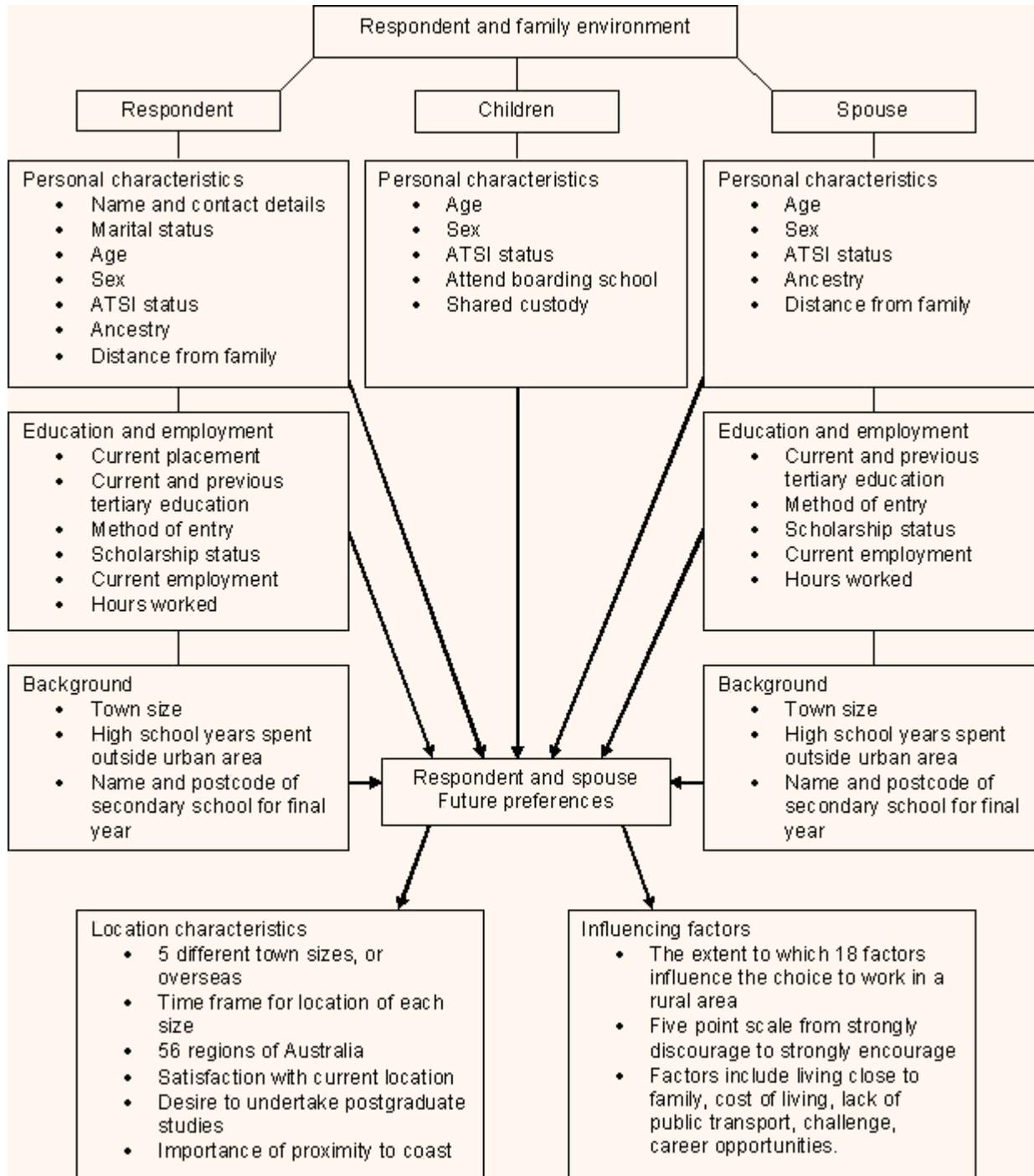


Figure 1: Components of respondent and spouse characteristics.



Acknowledgments

The authors thank the student coordinators for their assistance in developing the survey and in keeping the project running: Vanessa O'Rourke and Shelley Hermann in Lismore, Jane Nichols in Grafton and Naree Hancock in Murwillumbah.

References

1. Laven G, Beilby J, Wilkinson D, McElroy H. Factors associated with rural practice among Australian-trained general practitioners. *Medical Journal of Australia* 2003; **179**: 75-79.
2. Humphreys J, Jones J, Jones M, Hugo G, Bamford E, Taylor D. A critical review of rural medical workforce retention in Australia. *Australian Health Review* 2001; **24**: 91-102.
3. Rolfe IE, Person SA, O'Connell DL, Dickinson JA. Finding solutions to the rural doctor shortage: the roles of selection versus undergraduate medical education at Newcastle. *Australian and New Zealand Journal of Medicine* 1995; **25**: 512-517.
4. Hays RB, Nichols A, Wise A, Adkins P, Craig M, Mahoney M. Choosing a career in rural practice in Queensland. *Australian Journal of Rural Health* 1995; **3**: 171-174.
5. 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 doctors. *Medical Education* 2003; **37**: 809-814.
6. Shoo AM, Stagnitti KE, Mercer C, Dunbar J. A conceptual model for recruitment and retention: allied health workforce enhancement in Western Victoria, Australia. *Rural and Remote Health* **5**: 477. (Online) 2005. Available: www.rrh.org.au (Accessed 1 July 2006).
7. Richards HM, Farmer J, Selvaraj S. Sustaining the rural primary healthcare workforce: survey of healthcare professionals in the Scottish Highlands. *Rural and Remote Health* **5**: 365. (Online) 2005. Available: www.rrh.org.au (Accessed 1 July 2006).
8. Reamy J. Physician recruitment in rural Canada: programs in New Brunswick, Newfoundland, and Nova Scotia. *Journal of Rural Health* 1994; **10**: 131-136.
9. Bushy A, Leipert B. Factors that influence students in choosing rural nursing practice: a pilot study. *Rural and Remote Health* **5**: 387. (Online) 2005. Available: www.rrh.org.au (Accessed 1 July 2006).
10. Humphreys J, Hegney D, Lipscombe J, Gregory G, Chater B. Whither rural health? Reviewing a decade of progress in rural health. *Australian Journal of Rural Health* 2002; **10**: 2-14.
11. Adams M, Dollard J, Hollins J, Petkov J. Development of a questionnaire measuring student attitudes to working and living in rural areas. *Rural and Remote Health* **5**: 327. (Online) 2005. Available: www.rrh.org.au (Accessed 1 July 2006).
12. Jones JA, Humphreys JS, Adena MA. Rural GPs' ratings of initiatives designed to improve rural medical workforce recruitment and retention. *Rural and Remote Health* **4**: 314. (Online) 2004. Available: www.rrh.org.au (Accessed 1 July 2006).
13. Butler C, Sheppard L. The impact of undergraduate rural education on recently graduated physiotherapists. *Australian Journal of Physiotherapy* 1999; **45**: 23-30.
14. Hegney D, McCarthy A, Rogers-Clark C, Gorman D. Why nurses are attracted to rural and remote practice. *Australian Journal of Rural Health* 2002; **10**: 178-186.
15. Eley D, Young L, Shrapnel M, Wilkinson D, Baker P, Hegney D. Medical students and rural general practitioners: congruent vies on the reality of recruitment into rural medicine. *Australian Journal of Rural Health* 2007; **15**: 12-20.



16. Heaney S, Tolhurst H, Baines S. Choosing to practice in rural dietetics. What factors influence that decision? *Australian Journal of Rural Health* 2004; **12**: 192-196.
17. Tolhurst HM, Adams J, Stewart SM. An exploration of when urban background medical students become interested in rural practice. *Rural and Remote Health* **6**: 452. (Online) 2006. Available: www.rrh.org.au (Accessed 1 July 2006).
18. Ward AM, Kamien M, Lopes DG. Medical career choice and practice location: early factors predicting course completion, career choice and practice location. *Medical Education* 2004; **38**: 239-248.
19. Rabinowitz HK, Diamond JJ, Hojat M, Hazelwood CE. Demographic, educational and economic factors related to recruitment and retention of physicians in rural Pennsylvania. *Journal of Rural Health* 1999; **15**: 212-218.
20. Woloschuk W, Tarrant M. Does rural education experience influence students' likelihood of rural practice? Impact of student background and gender. *Medical Education* 2002; **36**: 241-247.
21. Woloschuk W, Tarrant M. Do students from rural background engage in rural family practice more than their urban-raised peers? *Medical Education* 2004; **38**: 259-261.
22. Eley D, Baker P. Does recruitment lead to retention? Rural Clinical School training experiences and subsequent intern choices. *Rural and Remote Health* **6**: 511. (Online) 2006. Available: www.rrh.org.au (Accessed 1 July 2006).
23. Brooks RG, Walsh M, Mardon RE, Lewis M, Clawson A. The roles of nature and nurture in the recruitment and retention of primary care physicians in rural areas: a review of the literature. *Academic Medicine* 2002; **77**: 790-798.
24. Scammon DL, Williams SD, Li LB. Understanding physicians' decisions to practice in rural areas as a basis for developing recruitment and retention strategies. *Journal of Ambulatory Care Marketing* 1994; **5**: 85-100.
25. DeWitt DE, McLean R, Newbury J, Shannon S, Critchley J. Development of a common national questionnaire to evaluate student perceptions about the Australian Rural Clinical Schools Program. *Rural and Remote Health* **5**: 486. (Online) 2005. Available: www.rrh.org.au (Accessed 1 July 2006)
26. Committee of Deans of Australian Medical Schools (CDAMS). *Medical Schools Outcomes Database project 2005: Commencing Medical Students Questionnaire*. (Online) 2007. Available: http://www.medicaldeans.org.au/msod_files/2005_questionnaire.pdf (Accessed 7 January 2007).
27. Australian Bureau of Statistics. *Australian Standard Geographical Classification (ASGC), 2005*. ABS cat. no. 1216.0. Canberra: ABS, 2005.
28. Salt B. *The big shift*. Melbourne, VIC: Hardie Grant Publishing, 2005.
-



Appendix I

Careers in Rural Health Tracking Survey (CIRHTS) survey instrument

Career in Rural Health Tracking Survey (CIRHTS)



Department of Rural Health Broken Hill

**Northern Rivers
University
Department of
Rural Health**

PO Box 3074
61 Uralla Street
LISMORE NSW 2480
Ph: 02 6620 7570
Fax: 02 6620 7270

**Department of Rural Health
Broken Hill**

Ph: 08 8080 1200
Fax: 08 8087 5240

Surname/ Family Name

First/ Given Name

Preferred Contact Details

Please use BLOCK letters

Street Address

Town/Suburb

Post Code

Telephone

Mobile

Email

Other Stable Contact Details

ie: via parents

Street Address

Study Coordinators:

iate Professor 2. Jeffrey Fuller—A ssociate Professor 3. Hudson
Sue Page—Director of Education 5. Jocelyn Morris—Rural
ordinator. 6. David Game—Director of Clinical Medicine.
king (CIRHT) Study was developed in Collaboration with Senior
from the North Coast Area Health Service.
information contact the Study Coordinators.



Appendix I – cont'd

1. Deborah Schofield—A ssoc
Birden—Senior Lecturer 4
Attachment Programs Co
The Careers in Rural Health Trau
clinicians
For further

Town/Suburb

Post Code

Telephone

Mobile

Email

Family: We are interested in the relationship between Gender, Family Status and Career Preferences.

1. What is your marital status?

Never married
Widowed
Divorced/Separated
Married/De Facto

2. How many children do you have?

0
1
2
3
>3

3. Male or Female?

You	Spouse/Partner	Child 1	Child 2	Child 3
<input type="checkbox"/> Male				
<input type="checkbox"/> Female				

4. What was the person's age last birthday?

You	Spouse/Partner	Child 1	Child 2	Child 3
<input type="text"/>				

5. Does this child attend Boarding School?

<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
<input type="checkbox"/> No	<input type="checkbox"/> No	<input type="checkbox"/> No



Appendix I – cont'd

6. Do you have shared custody of this child?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

7. What is the person's ancestry? (what group do you identify with - tick up to 2)

	You	Your Mother	Your Father	Spouse/ Partner	Spouse's Mother	Spouse's Father
Australian/New Zealand	<input type="checkbox"/>					
Oceania (includes Melanesian, Papuan, Micronesian, Polynesian)	<input type="checkbox"/>					
North-west European (includes British and Irish)	<input type="checkbox"/>					
Southern and Eastern European	<input type="checkbox"/>					
North African/Middle Eastern (includes Arab and Jewish)	<input type="checkbox"/>					
South-East Asian (includes Vietnamese, Indonesian and Timorese)	<input type="checkbox"/>					
North-East Asian (includes Chinese and Japanese)	<input type="checkbox"/>					
Southern and Central Asian	<input type="checkbox"/>					
People of the Americas (includes US, Canada and Caribbean)	<input type="checkbox"/>					
Sub-Saharan Africa (includes Central, West, Southern and East Africa)	<input type="checkbox"/>					

8. Are you Aboriginal or Torres Strait Islander?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No

We would like to know more about where your extended family live.

9. How far away do you live from your mother? (from your usual residential address)

You	
<input type="checkbox"/>	Deceased
<input type="checkbox"/>	<50 km
<input type="checkbox"/>	50-100 km
<input type="checkbox"/>	101-200 km
<input type="checkbox"/>	201-500 km
<input type="checkbox"/>	>501 km

Spouse/Partner	
<input type="checkbox"/>	Deceased
<input type="checkbox"/>	<50 km
<input type="checkbox"/>	50-100 km
<input type="checkbox"/>	101-200 km
<input type="checkbox"/>	201-500 km
<input type="checkbox"/>	>501 km

10. How far away do you live from your father? (from your usual residential address)

You	
<input type="checkbox"/>	Deceased
<input type="checkbox"/>	<50 km

Spouse/Partner	
<input type="checkbox"/>	Deceased
<input type="checkbox"/>	<50 km



Appendix I – cont'd

	<input type="checkbox"/> 50-100 km <input type="checkbox"/> 101-200 km <input type="checkbox"/> 201-500 km <input type="checkbox"/> >501 km	<input type="checkbox"/> 50-100 km <input type="checkbox"/> 101-200 km <input type="checkbox"/> 201-500 km <input type="checkbox"/> >501 km
--	--	--

More about you

11. Current Placement: Town

State

Discipline (eg Medical, Physiotherapy)

How long was your placement? (weeks)

12. Current Studies:

	You	Spouse
Degree	<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>
Institution	<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>
Current Year (eg 1st, 2nd)	<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>
Year you expect to complete	<input style="width: 150px;" type="text"/>	<input style="width: 150px;" type="text"/>

13. Admission/Entry Scheme:
Please indicate if you are: (please select one response only)

Unbonded Commonwealth Supported (HECS) student		You		Spouse/Partner
Medical Rural Bonded Scholarship (MRBS) student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bonded Medical Places Scheme (BMPS) student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Australian fee-paying student	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<hr/>				
		You		Spouse/Partner

14. Scholarship:
Do you hold a scholarship?

No		You		Spouse/Partner
Yes, Medical Rural Bonded Scholarship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, Rural Australian Medical Undergraduate Scholarship (RAMUS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, John Flynn Scholarship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Yes, Other (please specify name of scholarship)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Appendix I – cont'd

15. Other qualifications:	You	Spouse/Partner
Name of Qualification	<input type="text"/>	<input type="text"/>
Year Commenced	<input type="text"/>	<input type="text"/>
Year Completed	<input type="text"/>	<input type="text"/>
Name of Qualification	<input type="text"/>	<input type="text"/>
Year Commenced	<input type="text"/>	<input type="text"/>
Year Completed	<input type="text"/>	<input type="text"/>

16. Current Employment (main job)?	You	Spouse/Partner
See Attachment 1 (enter 4 Digit Code)	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Usual No. hours worked pw	<input type="text"/>	<input type="text"/>
Town	<input type="text"/>	<input type="text"/>
State	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>
Postcode	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Country	<input type="text"/>	<input type="text"/>

We would like to know more about where you grew up and where you would like to work in the future.

17. I regard myself as being from the following background:	You	Spouse/Partner
	<input type="checkbox"/> Capital City or major urban centre (>100,000)	<input type="checkbox"/> Capital City or major urban centre (>100,000)
	<input type="checkbox"/> Regional City or Large town (25,000-100,000)	<input type="checkbox"/> Regional City or Large town (25,000-100,000)
	<input type="checkbox"/> Smaller town (10,000-24,999)	<input type="checkbox"/> Smaller town (10,000-24,999)
	<input type="checkbox"/> Small rural community (<10,000)	<input type="checkbox"/> Small rural community (<10,000)

18. Did you complete high school in Australia?	You	Spouse/Partner
	<input type="checkbox"/> Yes (go to Question 19)	<input type="checkbox"/> Yes (go to Question 19)



Appendix I – cont'd

19. Number of years of secondary schooling in Australia outside of a capital city or major urban area: Gosford-Wyong, Newcastle, Wollongong, Queanbeyan, Blue Mountains, Geelong, Gold Coast-Tweed Heads, Townsville.

No (go to Question 21)

You Years

Spouse/Partner Years

20. Name and postcode of secondary school for your final year?

You

Spouse/Partner

21. Would you and your spouse be happy to work in towns of the following size and when? (please circle)

	Never	Yes, within 1 year	Yes, within 5 years	Yes, >5 yrs	Unsure
	YOU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
YOUR SPOUSE	<input type="checkbox"/>				

Capital city
Major urban centre: i.e. Gosford-Wyong, Newcastle, Wollongong, Queanbeyan, Blue Mountains, Geelong, Gold Coast-Tweed Heads, Townsville-Thuringowa (>100,000)
Regional city or large town in Australia (25,000-100,000)
Smaller town in Australia (10,000-24,999)
Small rural community in Australia (<10,000)
Overseas

22a. In the list below, tick (✓) the areas in which you and your spouse would be happy to work in the future

b. Also, please circle (○) the area in which you currently live.

Refer to Attachment 2 for area maps.

NSW	VIC		QLD	
	You	Spouse/ Partner	You	Spouse/ Partner
Sydney	<input type="checkbox"/>	<input type="checkbox"/>	Melbourne	<input type="checkbox"/>
Hunter	<input type="checkbox"/>	<input type="checkbox"/>	Barwon	<input type="checkbox"/>
Illawarra	<input type="checkbox"/>	<input type="checkbox"/>	Western District	<input type="checkbox"/>
South Eastern	<input type="checkbox"/>	<input type="checkbox"/>	Central Highlands	<input type="checkbox"/>
			Brisbane	<input type="checkbox"/>
			Moreton	<input type="checkbox"/>
			Wide Bay-Burnett	<input type="checkbox"/>
			Darling Downs	<input type="checkbox"/>



Appendix I – cont'd

<table border="0"> <tr><td>Richmond-Tweed</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Mid-North Coast</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Northern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>North Western</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Far West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Central West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Murray</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Murrumbidgee</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	Richmond-Tweed	<input type="checkbox"/>	<input type="checkbox"/>	Mid-North Coast	<input type="checkbox"/>	<input type="checkbox"/>	Northern	<input type="checkbox"/>	<input type="checkbox"/>	North Western	<input type="checkbox"/>	<input type="checkbox"/>	Far West	<input type="checkbox"/>	<input type="checkbox"/>	Central West	<input type="checkbox"/>	<input type="checkbox"/>	Murray	<input type="checkbox"/>	<input type="checkbox"/>	Murrumbidgee	<input type="checkbox"/>	<input type="checkbox"/>	<table border="0"> <tr><td>Wimmera</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Loddon</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Mallee</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Goulburn</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Ovens-Murray</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Gippsland</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>East Gippsland</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	Wimmera	<input type="checkbox"/>	<input type="checkbox"/>	Loddon	<input type="checkbox"/>	<input type="checkbox"/>	Mallee	<input type="checkbox"/>	<input type="checkbox"/>	Goulburn	<input type="checkbox"/>	<input type="checkbox"/>	Ovens-Murray	<input type="checkbox"/>	<input type="checkbox"/>	Gippsland	<input type="checkbox"/>	<input type="checkbox"/>	East Gippsland	<input type="checkbox"/>	<input type="checkbox"/>	<table border="0"> <tr><td>South West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Central West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Fitzroy</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Mackay</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Northern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>North West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Far North</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	South West	<input type="checkbox"/>	<input type="checkbox"/>	Central West	<input type="checkbox"/>	<input type="checkbox"/>	Fitzroy	<input type="checkbox"/>	<input type="checkbox"/>	Mackay	<input type="checkbox"/>	<input type="checkbox"/>	Northern	<input type="checkbox"/>	<input type="checkbox"/>	North West	<input type="checkbox"/>	<input type="checkbox"/>	Far North	<input type="checkbox"/>	<input type="checkbox"/>			
Richmond-Tweed	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Mid-North Coast	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Northern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
North Western	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Far West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Central West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Murray	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Murrumbidgee	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Wimmera	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Loddon	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Mallee	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Goulburn	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Ovens-Murray	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Gippsland	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
East Gippsland	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
South West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Central West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Fitzroy	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Mackay	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Northern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
North West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Far North	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
<table border="0"> <tr><td colspan="2" style="text-align: center;">SA</td></tr> <tr><td style="text-align: center;">You</td><td style="text-align: center;">Spouse/ Partner</td></tr> <tr><td>Adelaide</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Outer Adelaide</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>South East</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Murray Lands</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Northern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Eyre</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Yorke and Lower North</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	SA		You	Spouse/ Partner	Adelaide	<input type="checkbox"/>	<input type="checkbox"/>	Outer Adelaide	<input type="checkbox"/>	<input type="checkbox"/>	South East	<input type="checkbox"/>	<input type="checkbox"/>	Murray Lands	<input type="checkbox"/>	<input type="checkbox"/>	Northern	<input type="checkbox"/>	<input type="checkbox"/>	Eyre	<input type="checkbox"/>	<input type="checkbox"/>	Yorke and Lower North	<input type="checkbox"/>	<input type="checkbox"/>	<table border="0"> <tr><td colspan="2" style="text-align: center;">WA</td></tr> <tr><td style="text-align: center;">You</td><td style="text-align: center;">Spouse/ Partner</td></tr> <tr><td>Perth</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>South West</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Midlands</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>South Eastern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Central</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Pilbara</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Kimberley</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Lower and Upper Great Southern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	WA		You	Spouse/ Partner	Perth	<input type="checkbox"/>	<input type="checkbox"/>	South West	<input type="checkbox"/>	<input type="checkbox"/>	Midlands	<input type="checkbox"/>	<input type="checkbox"/>	South Eastern	<input type="checkbox"/>	<input type="checkbox"/>	Central	<input type="checkbox"/>	<input type="checkbox"/>	Pilbara	<input type="checkbox"/>	<input type="checkbox"/>	Kimberley	<input type="checkbox"/>	<input type="checkbox"/>	Lower and Upper Great Southern	<input type="checkbox"/>	<input type="checkbox"/>	<table border="0"> <tr><td colspan="2" style="text-align: center;">TAS</td></tr> <tr><td style="text-align: center;">You</td><td style="text-align: center;">Spouse/ Partner</td></tr> <tr><td>Hobart</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Southern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Northern</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Mersey-Lyell</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	TAS		You	Spouse/ Partner	Hobart	<input type="checkbox"/>	<input type="checkbox"/>	Southern	<input type="checkbox"/>	<input type="checkbox"/>	Northern	<input type="checkbox"/>	<input type="checkbox"/>	Mersey-Lyell	<input type="checkbox"/>	<input type="checkbox"/>
SA																																																																							
You	Spouse/ Partner																																																																						
Adelaide	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Outer Adelaide	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
South East	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Murray Lands	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Northern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Eyre	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Yorke and Lower North	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
WA																																																																							
You	Spouse/ Partner																																																																						
Perth	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
South West	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Midlands	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
South Eastern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Central	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Pilbara	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Kimberley	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Lower and Upper Great Southern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
TAS																																																																							
You	Spouse/ Partner																																																																						
Hobart	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Southern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Northern	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Mersey-Lyell	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
			<table border="0"> <tr><td colspan="2" style="text-align: center;">TERRITORIES</td></tr> <tr><td style="text-align: center;">You</td><td style="text-align: center;">Spouse/ Partner</td></tr> <tr><td>ACT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Darwin</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> <tr><td>Rest of NT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr> </table>	TERRITORIES		You	Spouse/ Partner	ACT	<input type="checkbox"/>	<input type="checkbox"/>	Darwin	<input type="checkbox"/>	<input type="checkbox"/>	Rest of NT	<input type="checkbox"/>	<input type="checkbox"/>																																																							
TERRITORIES																																																																							
You	Spouse/ Partner																																																																						
ACT	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Darwin	<input type="checkbox"/>	<input type="checkbox"/>																																																																					
Rest of NT	<input type="checkbox"/>	<input type="checkbox"/>																																																																					

23. How satisfied are you with where you are currently living?

<p>You</p> <p style="text-align: center;">-2 -1 1 2</p> <hr style="width: 100%; border: 0.5px solid black;"/> <p style="text-align: center;">Very dissatisfied Somewhat dissatisfied Somewhat satisfied Very satisfied</p>	<p>Spouse/Partner</p> <p style="text-align: center;">-2 -1 1 2</p> <hr style="width: 100%; border: 0.5px solid black;"/> <p style="text-align: center;">Very Dissatisfied Somewhat dissatisfied Somewhat satisfied Very satisfied</p>
--	---

24. Are your preferences for location for future practice influenced by your desire to undertake post graduate studies?

<p>You</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>	<p>Spouse/Partner</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
---	--



Appendix I – cont'd

25. How important is it for you to be living close to the coast? (circle number)

You					Spouse/Partner				
-2	-1	0	1	2	-2	-1	0	1	2
Totally	Fairly	Neutral	Somewhat	Very	Totally	Fairly	Neutral	Somewhat	Very
unimportant	unimportant		important	important	unimportant	unimportant		important	important

26. To what extent would each of the following factors influence your choice and that of your spouse/partner (if applicable) to work in a rural area? (please circle)

Key: -2 = Strongly Discourage -1= Slightly Discourage 0 = Neutral +1 = Slightly Encourage +2 = Strongly Encourage

You		Spouse/Partner
-2 -1 0 +1 +2	Living Close to Family	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Living close to friends	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Rural lifestyle/culture	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Cost of living	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Cost of accommodation	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Lack of public transport	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Career opportunities	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Remuneration	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Workload	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Type of work	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Environment for raising children	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Access to children (custodial arrangements)	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Bonding/other contracting work requirement	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Desire to help people in rural/remote areas	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Challenge	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Familiarity with rural area	-2 -1 0 +1 +2
-2 -1 0 +1 +2	My current rural placement	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Previous rural placements	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Other (please specify under)	-2 -1 0 +1 +2
-2 -1 0 +1 +2	Other (please specify under)	-2 -1 0 +1 +2

27. Would you be prepared to take part in a focus group?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No



Appendix I – cont'd

Please return this survey form to:

CIRHTS
PO Box 3074
LISMORE NSW 2480

Thank you for participating in this survey

Modified on 8 January 2008: A sentence has been added to the Method section: 'Some questions (such as questions 13, 14, 17 and 21; Appendix) were taken or modified from previously published questionnaires in order to make the survey comparable with other data sources^{25,26}.' In addition, an additional reference has been inserted into the reference list as reference 26.