Original research

TITLE: Choice or chance! The influence of decentralised training on GP retention in the Bogong region of Victoria and New South Wales.

ABSTRACT

Introduction: Attracting, training and retaining GPs in rural communities has long been the subject of intense interest and debate in medical and political circles. Government reviews and policy decisions, including the introduction of the ten-year moratorium, have been implemented to address workforce shortages in rural Australia. In a landmark decision in 1998, a government assessment of GP training recommended dissolution of centralised general practice education and, in 2003, regional training providers began training GP registrars in a decentralised environment.

This study examines the impact of the decentralised model of GP training on the retention of GPs who trained with Bogong Regional Training Network between 2004 and 2009. The study also explores the differences in perspectives of Australian and overseas born GPs as these relate to remaining in rural practice.

Method: Registrar file data were examined and socio-demographic profiles of GPs compiled. Of a total sample of 61 doctors who had completed their GP training with Bogong, 30 agreed to participate in semi-structured interviews to discuss career path decisions. Each doctor was offered a small honorarium for participating. A response rate of 58.8% was achieved for those doctors who could be contacted. The data sets were then analysed to identify and examine themes associated with GP career path decision choices.

Results: At the end of 2009, over 42% (n=24) of the fellowed doctors are in rural general practice; 32% (n=18) remaining in the Bogong region. There was a significant relationship between the place of birth and remaining in rural practice, with almost three quarters (73% n=16) of the Australian born respondents and almost a quarter (23% n=8) of the overseas born respondents remaining in rural practice after fellowship (χ² = 13.68 p<0.001) but of the nine overseas born, Australian trained medical graduates, only one has remained in rural practice.

Conclusions: The decentralised training model has had a positive influence on retention rates in rural practice in the Bogong region. There are cultural and regulatory differences between Australian and overseas born doctors that profoundly influence the decision to locate and remain in rural communities with Australian born doctors.
significantly more likely to remain in rural practice after completing training. For Australian born doctors, informed choice draws them to rural general practice while for overseas born doctors, chance, is a major contributing factor that influences their decisions to locate in the region. This study supports the continued development of decentralised and rural specific training pathways for Australian doctors as an effective method in attracting and retaining doctors to rural Australia during and after general practice training.

Introduction

Attracting, training and retaining GPs in rural communities has long been the subject of intense interest and concern in medical and political circles. Indeed, much research has been done to determine career intentions of Australian trained doctors to work in rural locations[1,2]. Moreover, government reviews and policy decisions, including the decentralisation of GP training and the ten year moratorium have tried to address GP training and chronic rural and remote workforce shortages[3,4,5,6,7].

In an environment of continuing GP shortages in rural Australia, this study examines whether the decentralised model of GP training results in the retention of doctors in rural areas. Specifically, the study explores the influence of the decentralised model of GP training on the retention of 61 doctors who trained with Bogong Regional Training Network (BRTN) in rural locations in North-east Victoria and southern New South Wales between 2004 and 2009.

The decentralised model of GP training

In 1998, the then Minister for Health, Michael Wooldridge initiated a ministerial review of GP training. Central to that review was a continuing concern about the serious doctor shortfall in rural and remote Australia and the need to prioritise medical vocational training. In particular the review noted the Government’s concern about a “… chronic undersupply of rural doctors” in all states and territories[8].

After wide industry and community consultation, the review noted that GPs and expert stakeholders were calling for substantial changes in the way GP training was managed and delivered[9]. It recommended dissolution of the centralised Royal Australian College of General Practitioners (RACGP) model of training in favour of a decentralised approach that would attract GPs to rural areas and therefore foster greater equity of provision of medical services in rural Australia.

In 2001 General Practice Education and Training (GPET) was formed to manage GP training via a consortium of 21 regional training providers (RTPs)[10]. RTPs began delivering training to GP registrars in 2004[11]. Between 2004 and 2009, 1610 Australian medical graduates and 564 international medical graduates became fellows of the RACGP through GPET[12]. Of these, 61 GP registrars completed their training with
BRTN; 57 of whom gained their fellowship of the RACGP and four who were awaiting fellowship when this study was conducted.

**Ten-year Moratorium**

Introduced in 1997, the moratorium was an attempt to reduce a perceived oversupply of generalist doctors in metropolitan areas[13]. This amendment to the Health Insurance Act 1973, denied international medical graduates and some overseas born, Australian trained doctors, access to a Medicare provider number and therefore access to government funded rebates, except under certain circumstances[14]. However, in order to address a serious doctor shortage in rural and regional Australia, exemptions to Section 19AB of the Bill enabled these doctors to claim Medicare rebates provided they completed an accredited GP training program and practised in a designated ‘area of need’ or place of workforce shortage for a period of up to ten years[15,16]. As a result, doctors are more likely than non-medical migrants to locate in regional and rural areas[17]. In 2002 there were 1,303 international medical graduates with Section 19AB exemptions\(^\text{18}\) and in 2010 there were 6,576[19].

**Method**

Data from the Interactive Registrar Information System (IRIS), the GP Registrar Information Management and Education system (GPrime) and paper files were used to construct a comprehensive socio-demographic profile of former registrars. Semi-structured telephone and face-to-face interviews were conducted with GPs to explore career path decisions. Semi-structured interviews allowed the flexibility to explore different circumstances of sub-sets of respondents. The data were analysed to identify and more closely examine emergent themes associated with GP career decisions. Of 61 prospective interviewees, current practice addresses were found for 51 doctors. The remaining 10 doctors could not be contacted by phone or email. Practice managers were contacted by telephone and the research project explained. ‘Invitations to participate’ were then sent to each doctor and follow up phone calls made to liaise with practice managers to schedule interview times. In June and July 2009, 27 of the 51 doctors contacted agreed to participate in 10-minute telephone interviews. Three additional doctors each participated in one-hour face-to-face interviews to further explore themes of interest. Each doctor was offered a small honorarium for participating. Interviews were conducted with 30 doctors out of the total of 51 doctors who could be contacted, giving a response rate of 58.8%.

**Population profile**

Over 36\% (n=22) of the doctors in the study were Australian born; none of whom identified as Aboriginal or Torres Strait Islander. The remaining 64\% (n=39) were born overseas (Table 1), principally from Bangladesh, Iraq, Malaysia, China and India, reflecting the national migration trend data of overseas trained doctors in Australia[20].
A total of 52% of doctors in the study were women and over 80% of the doctors studied were aged between 30 and 44 years; the remainder being between 45 and 56 years. All Australian born doctors and nine overseas born doctors gained their primary medical qualifications in Australia (Table 1). Almost 72% (n=28) of overseas born doctors gained their primary medical qualifications in their countries of origin. Of a total of 30 international medical graduates, 25 were subject to the ten-year moratorium. Three of the nine overseas born, Australian medical graduates were also subject to the moratorium.

Table 1: Birth location, gender, location of primary medical qualification and moratorium status

<table>
<thead>
<tr>
<th>Origin</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
<th>Location of primary medical qualification</th>
<th>Ten-year moratorium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australian born</td>
<td>9</td>
<td>13</td>
<td>22</td>
<td>Australia</td>
<td>0</td>
</tr>
<tr>
<td>Overseas born</td>
<td>15</td>
<td>15</td>
<td>30</td>
<td>Overseas</td>
<td>27</td>
</tr>
<tr>
<td>Overseas born</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>Australia</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>32</td>
<td>61</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

Results

At the end of 2009, over 42% (n=24) of the 57 fellowed GPs remained in rural general practice, 32% (n=18) in the Bogong region. Of the remaining 58% (n=33), 19 doctors were practising in inner metropolitan areas and seven were located in suburbs more than 25 kilometers from the centre of a capital city. One doctor was living rurally but not practising medicine and six individuals were unable to be traced (Table 2).

The results of this study show that there was a statistically significant relationship between a doctor’s country of birth and remaining in rural practice, with almost three quarters (73% n=16) of the Australian born respondents and almost a quarter (23% n=8) of the overseas born respondents remaining in rural practice after fellowship ($\chi^2 = 13.68$, $p<0.001$). Of the nine overseas born, Australian trained medical graduates, only one has remained in rural practice.

Table 2: Location of GPs in 2009

<table>
<thead>
<tr>
<th>Location at end of 2009</th>
<th>Australian born</th>
<th>Overseas born</th>
<th>Total (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>16</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>Metropolitan</td>
<td>4</td>
<td>22</td>
<td>26</td>
</tr>
<tr>
<td>Unknown</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Not practising</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>35</td>
<td>57</td>
</tr>
</tbody>
</table>

$\chi^2 = 13.68$, $p<0.001$
Most doctors who stayed in rural practice after fellowship generally remained in or near one of the towns in which they had done a placement or where they had completed extended or advanced skills training.

**What brought them to rural practice?**

The majority of the Australian born doctors in this study chose rural practice because they or their partners had experienced rural or semi rural environments and were familiar with rural culture and a rural lifestyle. Some were influenced by having a spouse with a rural background, familial connections or opportunity for spouse employment:

_He coaxed me to move up to the country with him. …. I said to my husband, that if I hated it we will have to go back, or if I missed my family too much but it worked out well and we are … planning to stay here permanently._ (Australian born GP)

Others had chosen to embark on rural practice long before they completed their registrar training. For some it was part of a long-term plan and importantly, their choice was influenced by the type of medicine practised:

_I came here, because of … the procedural hospital work, the emergency work, the orthopaedic work. … It all seemed like a really exciting job._ (Australian born GP)

For the overseas born cohort, the training location was primarily determined by the requirements of ‘the ten-year moratorium’. Many of the overseas born doctors were from urban backgrounds; were unfamiliar with rural life or rural general practice and typically had little knowledge of the Bogong region. For these doctors, “chance” was an important factor in selecting a location for training:

_I didn’t know much about the area. It was not an informed decision I just made the decision without any consideration of what it would be like._ (Overseas born GP)

Nearly a quarter (23% n=8) of overseas born doctors chose to remain in rural general practice since gaining their fellowship. This group did not select rural general practice as a deliberate career choice. However, they found the experience of living and working in a rural environment both challenging and rewarding. The following comment provides insight into the importance of the rural training experience in retaining overseas born registrars after fellowship:

_If I didn’t come here to train, I wouldn’t be in the country. It is the experience of being in a rural community that gives you an understanding of what it is like. If you didn’t experience it, you wouldn’t even consider coming to a rural practice. I was forced to go rural because of the 10-year moratorium._ (Overseas born GP)
Why did some GPs leave rural practice?

A total of 45% (n=26) of the study cohort left rural general practice soon after attaining their FRACGP; most relocating to metropolitan practice. Four were Australian born and 22 were overseas born doctors. Eight of the nine overseas born, Australian trained doctors relocated to metropolitan practices in Australian cities. This study found that relocation was predominantly due to:

- the opportunity for specialist training,
- the importance of being close to extended family members who were city based,
- perceptions of better educational opportunities for children in city schools and universities, and
- lack of cultural support networks for themselves and their spouses in rural towns.

Specialisation: Two Australian born doctors took the opportunity to build on previous training experiences. Both had undertaken advanced rural skills posts with BRTN and were furthering their specialist training in city hospitals. One has since relocated in the Bogong region as a specialist anaesthetist. However, anecdotal evidence from discussions with practice managers suggest that two overseas born doctors that the researchers were unable to locate had also pursued specialist training in capital cities.

Proximity to family: Lack of familiarity with rural living and isolation from family and friends for overseas born doctors was a major reason for relocating to metropolitan areas. While many respondents considered the challenge and diversity of rural general practice far more appealing than metropolitan practice, the importance of close contact with city based relatives and friends took precedence over personal job satisfaction:

*I was attracted to a city practice mainly because my family and friends were all in the city.* (Overseas born, overseas trained GP)

Educational opportunities: Overseas born doctors were of the view that their children would have more opportunities in life if they were educated in the city. When asked what influenced him to relocate to a metropolitan practice, one doctor remarked:

*Kids schooling. Schooling in the [town name] area was not going to be satisfactory. There was a lack of choice of good schools.*

While this view was fairly typical of the overseas born doctors in this study, it was not the case for Australian born doctors. They were more likely to educate their children in local primary and secondary schools and then accept that their offspring would move to a capital city when they began their university careers.

Support networks: Several overseas born respondents had experienced difficulties adapting to life in small rural communities. Many towns are not as culturally diverse as larger regional or metropolitan centres so social networks and activities are hard to
establish. Even overseas born doctors who remained in rural practice after fellowship commented that isolation from city based family and friends, and lack of locally sourced Hal-al and Asian food and cultural activities was problematic. Similarly, and associated with distance from family, was the lack of suitable support networks for the spouses of doctors in rural towns:

> My wife didn’t cope with a rural environment. She was born in the city. We were both born overseas in the city. We had no family support in the rural town because our family were all in Melbourne. My wife couldn’t adapt to a rural lifestyle. (Overseas born, Australian trained GP)

**What sustains doctors in rural practice?**

While the triggers for attracting and deciding to remain in rural practice for Australian and overseas born doctors may be different, both groups agree about what sustains them in rural practice once that decision is made:

- a preference for a rural lifestyle and a fondness for rural people and communities,
- the diversity and challenge of rural practice, and
- the ability to provide holistic patient care.

**Rural lifestyle, rural people and communities:** A desire for a rural lifestyle and a connection to rural people and their communities together with proximity to Melbourne were the most commented upon reasons that Australian and overseas born respondents offered for remaining in rural practice. Many expressed an aversion to the fast pace of city life, traffic congestion, and the impersonal nature of suburban living. Several respondents commented on the slower pace of country living and the positive aspects of developing a strong sense of community. One respondent noted:

> The satisfaction of rural practice is tremendous. Working in a close-knit community is really good. You feel part of the community. (Australian born GP)

Another respondent described country people as more “down to earth” and more “genuine” than city folk. He enjoyed their openness and candour and felt he understood the issues facing many farming families. Yet another respondent in a small rural town, when asked why he had remained in the town where he trained, said:


**Diversity and challenge of rural practice:** Both Australian and overseas born respondents commented that a benefit of rural practice is having a good mix of different types of patients and being required to have a range of skills to deal with whoever comes in the door. They argued that there is a greater variety of medical conditions to manage than in metropolitan practice and believed they had more autonomy in treating patients, especially in emergency medicine.
Respondents reflected that the diversity of general practice, which included emergency and procedural work, was essential for skills development and provided far greater levels of job satisfaction than they would have if they worked in general practice in a metropolitan environment:

The greater the variety of cases and conditions, the better it is for skills development and job satisfaction. … This variety of exposure to a range of medical issues and problems makes you use your brain and clinical skills to the max. (Australian born GP)

Holistic patient care: A third important element that sustained Australian and overseas born GPs’ interest in rural practice was a commitment to provide holistic, “cradle to grave” patient care. Continuity of care and understanding the issues and problems facing whole families played a significant role in providing high levels of patient care and job satisfaction for rural general practitioners:

When I worked in big city hospitals you saw people as patients and they were gone again; you didn’t have that on-going continuity that you can get in a rural setting. (Australian born GP)

The positive aspects of being a doctor in a small town outweighed the disadvantages for those that wished to stay. One doctor expressed a strong sense of duty to the individuals and communities he served:

As a citizen, as an Australian citizen, I think that we also have some moral responsibility to give some support to the community. I think that is a good idea. To use your skill as well; it is a very good opportunity. (Overseas born GP)

Discussion

Has the decentralised model of GP training resulted in the retention of doctors in rural areas? Yes. But the extent to which the model has influenced GP retention rates is a complex issue. This is particularly true in light of the multidimensional nature of health care in Australia[21] and the interrelationships between work related and personal/lifestyle satisfaction factors in the overall social, political, economic and cultural environment[22]. This study has revealed that there is a positive association between rural training and rural retention for some doctors. At the conclusion of this study, 42% of doctors who trained with BRTN remained in the region. Separate data shows that in the Bogong region between 2004 and 2010, the full-time workload equivalence GP to population ratio fell from 1:1669[23] to 1:12622[4].

Consistent with the literature[25,26,27], the majority of the Australian born doctors in this study chose rural practice because they or their partners had experienced rural or semi rural environments and were familiar with rural culture and a rural lifestyle. This study also found that Australian born doctors are significantly more likely to remain in
rural practice after completing training than their overseas born colleagues. For
Australian born doctors, informed choice draws them to rural general practice. They
came to the region to train predominately because they were familiar with rural life; they
or their spouses had rural backgrounds or connections and many had a preference for
procedural work. This is consistent with contemporary Australian studies, which indicate
that not only does a rural lifestyle, people and communities exert a strong influence on
the choice of location for medical registrars[28]; but a rural background[29,30] and the
challenge of procedural practice[31] are strong predictors of the decision to practice in a
rural environment.

Australian born, Australian trained medical graduates are self-selecting individuals. They
are not subject to the moratorium or compelled to locate in a rural environment. Because
they have the opportunity to train and locate in specific rural locations from informed
choice, not by chance, it might be expected that they will remain in rural general practice
after fellowship as did nearly three quarters of the doctors in this study.

The literature is clear that prospective registrars with rural backgrounds and/or
associations are more likely to be attracted to and remain in rural practice after fellowship
than are registrars with urban backgrounds. This study confirms Australian born doctors
are more likely than recently arrived overseas born colleagues to have a “rural
connection” and be familiar with rural community life. In this regard there is a need to
recognise the importance of rural suitability as a selection criterion when engaging in the
GP registrar recruitment process.

On the other hand, the choice of most overseas born doctors is influenced by the
requirement to train in the rural pathway and work in an area of workforce shortage.
Consistent with Reed et al’s[32] study into barriers to employment of overseas trained
doctors, this study found overseas born doctors are more likely to select a rural location
on the basis of proximity to a capital city in order to remain close to extended family
members. In this sense they are attracted to a particular region more by chance than
choice.

Similarly, Alexander & Fraser[33] note that an important factor in the retention of
overseas trained doctors in rural practice relates to educational facilities for children and
work opportunities for partners. This study concurs: finding that relocation to
metropolitan practice after training was predominantly due to lack of cultural and familial
support networks and perceptions of limited employment and educational opportunities
for spouses and children.

Although the ten-year moratorium is discriminatory[34], its intent is to bring medical
services to designated areas of need in rural, remote and outer metropolitan regions. This
has been an effective catalyst in bringing overseas born doctors to rural and regional
centres[35]. However, whilst “obligation strategies” are common throughout the
world[36] and may provide a degree of workforce stability for a limited time[37], they do
not necessarily keep doctors in rural communities. This study has once again
demonstrated that doctors who wish to relocate to urban centres for family, educational or
other reasons do so after fellowship even if it means practising medicine on the fringes of
capital cities, and those doctors who want to work in rural do so and tend to stay there –
with nearly three quarters in this cohort.

While the decentralised training environment has had a positive influence on GP
retention rates in the Bogong region, particularly for Australian born graduates, there are
cultural and regulatory differences between Australian and overseas born doctors that
profoundly influence the decision to locate and remain in rural communities. An
understanding of these differences is essential if policy makers are to maximise the
retention of both groups of general practitioners in rural communities.

Evidence from this study suggests that decisions about location may be made early in the
GP career path decision-making phase. Thus it is vital to create early exposure to careers
in rural general practice through marketing general practice to school children, including
the children of overseas born migrants and embracing introductory programs such as the
Prevocational General Practice Placements Program (PGPPP). It is also important to
maintain opportunities for rural based decentralised training to accommodate the wave of
Australian trained medical students that are approaching graduation. To this end
development of specific rural training programs such as the Rural Generalist Pathway
need more support.

Many of the overseas born doctors in this study, even those who have returned to the
cities, have stated that they would not have been exposed to the benefits of rural medicine
or contemplated remaining in rural practice had it not been for the regulatory framework
that compelled them to locate in rural centres. For those that stayed, training, living and
working in a rural environment was an important influencing factor in their decisions to
remain in rural practice. Although they did not have substantial prior exposure to rural
community life or knowledge of North-east Victoria, they indicated that the quality of the
training experience and their experience of life in rural Australia unlocked opportunities
and provided them with choices they previously did not know existed. In forcing
registrars to train in the rural pathway, the ten-year moratorium has facilitated the
experience of country life and rural medicine that would not otherwise be considered or
imagined, as Lee et al. note; the experience of rural training can impact positively on
individuals’ decision to remain in rural practice[38].

It is unlikely that Australia’s need for overseas trained doctors will diminish in the
foreseeable future[39,40]. This group, including overseas born, adult migrants who gain
their primary medical qualifications in Australia, require different types of support and
assistance during GP training if they are to remain in rural locations. It is well
documented that social isolation and acculturative stress is problematic for overseas born
health professionals working in Australian rural communities[41], and there are growing
calls for greater levels of clinical and cultural support networks for overseas born
doctors[42,43]. Researching the specific support needs of overseas born doctors and their
families in order to minimise the isolation and challenges associated with living and
working in a rural environment is essential if overseas born doctors are to be retained in
rural communities.
Limitations

While this paper has revealed a positive association between rural training and rural retention, the population studied was limited to quite a small cohort of doctors trained in the Bogong region of North-east Victoria and southern New South Wales. The overseas born doctors had migrated to Australia as adults, were generally from urban, non-English speaking backgrounds and thus may not be generally representative of migrants who arrived as children or those from western English speaking cultures or rural environments.

Conclusion

The decentralised training model has had a positive influence on retention rates in rural practice in the Bogong region. There are cultural and regulatory differences between Australian and overseas born doctors that profoundly influence the decision to locate and remain in rural communities with Australian born doctors significantly more likely to remain in rural practice after completing training. For Australian born doctors, informed choice draws them to rural general practice while for overseas born doctors, chance, is a major contributing factor that influences their decisions to locate in the region. This study supports the continued development of decentralised and rural specific training pathways for Australian doctors as an effective method in attracting and retaining doctors to rural Australia during and after general practice training.


6 De Boer R, Boxall A, Biggs A, Buckmaster L, Gardner-Garden J, Jolly R. *The interim report of the National Health and Hospitals Reform Commission – a summary and


12 General Practice Education & Training. Request for statistical information about medical graduates of GPET registrar program E-mail response. (GPET) 30 July, 2010.


24 Primary Health Care Research & Information Service (PHC RIS). (20011) Key Division of General Practice characteristics 2009-2010. Available at


