Where do GP registrars work after they complete training? Associations of rural practice location and regional retention: a cross-sectional study.

Parker Magin











Background

 Access to general practice is fundamental to the health of Australian populations.

A particular concern is access to GPs for Australian rural populations.

 Aspects of the Australian General Practice Training program have been structured to enhance provision of vocational training in rural and regional areas.

Aims

 To establish the prevalence and associations of recently vocationallyqualified GP registrars

- practising in rural practice locations
- practising within their region of vocational training.

Methods

• A cross-sectional study conducted in 2015

Methods – inclusion criteria

Participants were

- alumni of three of Australia's then seventeen GP Regional Training Providers (RTPs)
 - non-capital major city and inner regional training practices
 - capital major city to very remote training practices
 - predominantly urban capital major city geographic footprint, but with inner regional training practices.
- within six-months to five years of having achieved College Fellowship.

Methods - recruitment

Alumni's contact details were obtained from the participating RTP's databases plus recourse to publicaly-available sources

Methods - recruitment

- An anonymous questionnaire was mailed/emailed from individual RTPs to their alumni
 - both hard-copy and online formats
 - March 2015
 - alumni responded either by reply-paid post or completion of a Survey Monkey link.

Methods – outcome measures

The outcome measures were

- i) rurality of practice
 - 'Rural' was defined as ASGC-RA2-5: 'inner regional', 'outer regional', 'remote' and 'very remote' (that is, not 'major cities').

ii) the alumnus practising within their former RTP's geographical footprint.

Methods- independent variables

- demographic data of the alumnus
- demographic data of current practice location

- current practice patterns
- perceptions of vocational training experiences

Methods – statistical analysis

Analyses employed univariate and multivariable logistic regression.

Results

• Response rate was 37.4% (n=230).

- Of alumni currently working in clinical general practice, 26.5% [95%Cls 20.8-33.0] *currently worked in rural locations*
 - 20.1% in Inner Regional areas
 - 4.4% Outer Regional
 - 0.5% Remote
 - 1.5% Very Remote

Results - rural location of practice

- Negative associations of practising rurally included
 - training in a predominantly-metropolitan RTP (OR 0.17 [95%CIs 0.07-0.41]),
 - time since Fellowship in years (OR 0.70 [95%Cls 0.52-0.93].

Associations of an alumnus currently practising in a rural (ASGC-RA 2-5) area: results from univariate and multivariable logistic regression

		Univariate		Adjusted	
Variable	Class	OR (95% CI)	Р	OR (95% CI)	P
Regional Training Provider	RTP2	0.53 (0.23, 1.21)	0.13	0.64 (0.25, 1.65)	0.36
Referent: RTP1	RTP3	0.12 (0.05, 0.27)	<0.001	0.17 (0.07, 0.41)	<0.001
Description of home area during schooling	Regional town	2.26 (0.99, 5.14)	0.052	1.60 (0.60, 4.28)	0.35
Referent: urban	Rural/small town	2.59 (1.09, 6.16)	0.031	1.43 (0.52, 3.92)	0.49
Vocational training pathway enrolled in	Rural	3.29 (1.52, 7.13)	0.003	2.05 (0.78, 5.40)	0.15
Took leave from GP training	Yes	0.48 (0.22, 1.03)	0.060	0.47 (0.20, 1.14)	0.095
University qualifications prior to medicine	Yes	2.04 (1.07, 3.91)	0.031	2.65 (1.18, 5.94)	0.018
<u>Time since Fellowship</u> (years)	-	<u>0.66 (0.51, 0.85)</u>	0.002	<u>0.70 (0.52, 0.93)</u>	0.015

Results – local retention

Of all alumni, 80.4% [95%CIs 74.3-85.3] currently worked within their former RTP's footprint.

Results – local retention

Training in a predominantly-metropolitan RTP was positively associated with RTP footprint retention (OR 5.78 [95%Cls 2.10-15.9]) as was training in a 'comprehensive' demographic RTP (OR 3.16 [1.09, 9.12])

Results – local retention

Negative associations of retention within the former RTP footprint

- having been enrolled in the rural vocational training pathway (OR 0.27 [95%Cls 0.08-0.95])
- currently working in a rural location (OR 0.40 [95%Cls 0.17-0.95]).

For current rurally-practising alumni, 61.1% [95%CIs 47.4-73.3] have remained within the footprint of their former RTP.

Associations of alumnus retention within the footprint of the Regional Training Provider trained with: results from univariate and multivariable logistic regression.

	Class	Univariate		Adjusted	
Variable		OR (95% CI)	Р	OR (95% CI)	Р
RTP	RTP2	2.16 (0.90, 5.21)	0.085	3.16 (1.09, 9.12)	0.034
Referent RTP1	RTP3	8.75 (3.52, 21.8)	<0.001	5.78 (2.10, 15.9)	<0.001
Where qualified as a doctor	Other than Australian	0.36 (0.16, 0.79)	0.011	0.63 (0.19, 2.09)	0.45
Vocational training pathway enrolled in	Rural	0.21 (0.09, 0.46)	<0.001	0.27 (0.08, 0.95)	0.042
Age	36-40	1.75 (0.66, 4.63)	0.26	2.52 (0.81, 7.90)	0.11
Referent <36	41+	0.56 (0.25, 1.27)	0.16	1.19 (0.42, 3.37)	0.75
Rurality of current practice Referent: major city	Inner Regional/ Outer Regional / Remote/ Very remote	0.23 (0.11, 0.47)	<0.001	0.40 (0.17, 0.95)	0.037
Number of different practices during GP training		1.38 (0.94, 2.01)	0.10	0.84 (0.54, 1.29)	0.41

Discussion – main findings

 While rural retention seems quite reasonable overall, the marked attrition suggested by these findings is of concern

- Retention within the footprint of the alumni's former RTP appears to be modest in rural areas
 - 'Attrition', as above, from rural areas??
 - Mobility of rural GP workforce??

Discussion – limitations

- Response rate
- Sample size
 - Blunt characterization of urban vs rural
- Characteristics of participating RTPs
- Inferences of causality can't be made from this cross-sectional study