Rural location choices of GPs: Evidence from MABEL

Matthew McGrail

Monash Rural Health

4th MABEL Research Forum, 6th May 2016

THE UNIVERSITY OF MELBOURNE
FACULTY OF BUSINESS & ECONOMICS
MELBOURNE INSTITUTE® of Applied Economic and Social Research
MONASH University Medicine, Nursing and Health Sciences

Funded by NHMRC

Intro to rural theme…

A quick reminder…aims:

- How do changes in personal and professional circumstances influence the decision to stay in, or leave, rural and remote areas?
- How effective are current and future medical workforce policy initiatives in improving recruitment and extending lengths of stay in rural and remote areas?

MABEL evidence: Workforce location

Quick overview: MABEL evidence

- Overall rural supply
- GP Vocational training pathway outcomes
- Rural GP retention / mobility
- ‘Pull’ of coastal / rural origin location

Overall rural supply (Oz trained only)

4 career stage cohorts:

- Late career (graduated 1970s)
- Mid career (graduated 1980s)
- Early career (graduated 1990s)
- Establishing career (graduated 2000s)

Observed 2008-13 (weighted for non-response bias)

Key pathway = childhood (rural) origin

Workforce supply outcomes:

1. GP or other specialist
2. Rural or metropolitan-based doctor

Rural supply & influence of rural origin

	Late career	Mid career	Early career	Establishing career
Proportion working as GPs	52.2%	49.6%	36.4%	30.3%
Proportion working as rural GPs	13.7%	12.1%	8.6%	9.3%
Proportion with rural origin working as rural GPs	18.8%	24.4%	16.7%	15.0%
Proportion with rural origin working as metro specialists	36.7%	34.6%	49.2%	53.9%
Proportion of rural GPs with rural origin	27.1%	39.6%	35.0%	37.4%

Rural GP vocational pathways (Oz trained)

Longitudinal data: GPs observed transitioning from vocational training to independent practice

- Aim: to investigate associations between 4 vocational training pathways and practice locations in the years following vocational qualification
- Data: 2008-13 (n=467)

Four training pathways:

1. Rural origin and rural training
2. Metropolitan origin and rural training
3. Rural origin and metropolitan training
4. Metropolitan origin and metropolitan training

Outcomes: Rural GP vocational training

The details of this slide cannot be made available as this research is currently under review.

Retention / mobility of rural GPs

Longitudinal data: GP location observed annually (2008 – 2013)

Policy interest: factors influencing ↑ rural retention and ↓ rural departures

MABEL data: account for / measure role of co-variates

Rural GP retention / mobility

Origin type	Retention (same type)	Left rural	MV model: OR (left rural)
MMM_1 (Major cities)	98.7%	n/a	n/a
MMM_2 (Regional, >50K)	94.8%	2.7%	Ref group (OR=1)
MMM_3 (Regional, 15-50K)	93.1%	4.0%	2.68 (0.88, 8.20)
MMM_4 (Regional, 5-15K)	90.7%	3.4%	3.46 (1.09, 11.0)*
MMM_5 (Regional, <5K)	90.7%	4.3%	5.03 (1.61, 15.8)**
MMM_6 (Remote)	87.8%	5.2%	1.27 (0.34, 4.81)
MMM_7 (Very remote)	82.5%	3.3%	0.23 (0.01, 4.17)

Funded by NHMRC

Rural retention – coastal effect?

Origin type	Retention (same type)	Left rural	Rural movers: To coastal %	Rural movers: To inland %
MMM_1	98.7%	n/a	38.6%	61.4%
MMM_2/3 & **Coastal**	94.6%	3.0%	47.6%	52.4%
MMM_2/3 & Inland	93.7%	3.7%	44.1%	55.9%
MMM_4/5 & **Coastal**	91.1%	3.6%	69.5%	30.5%
MMM_4/5 & Inland	92.0%	4.1%	55.4%	44.6%
MMM_6/7 & **Coastal**	86.1%	4.1%	55.9%	44.1%
MMM_6/7 & Inland	86.7%	5.1%	65.5%	34.5%

Rural GPs: Link to origin ‘type’

		Rural GPs - work location		
		Work: Inland	**Work: Low SES**	**Work: Rural GP**
Grew-up location	**Coastal (<30km)**	43.8%	72.1%	*18.9%*
	Inland (>30km)	64.7%	74.5%	*18.6%*
	Low SES: (<median)	45.0%	76.3%	*18.7%*
	High SES: (>median)	44.6%	67.5%	*19.1%*

Conclusions

- Rural supply of Australian-trained doctors remains challenging
- Rural GP training pathways linked to early-career location
- Increased selection of rural-origin only part of the solution
- ‘Rurality’ matters: poorer retention by MMM

- Multi-pronged approach needed to get rural doctors into the most problematic locations