The Health Workforce in Rural & Remote SA – Have we got it right?

Dr. Matthew Leach, Assoc. Prof. Martin Jones, Dr. Marianne Gillam

Department of Rural Health | University of South Australia
Background

- Close to 33% of Australia’s population live in regional areas, with an estimated population density as low as 10.33 people / km$^2$ (ABS 2017)

- The wide dispersion of the regional Australian population creates a number of challenges for health care delivery

- These challenges can be broadly grouped into
  - (a) Structural factors, and
  - (b) Attitudinal factors (Ronksley et al 2014)

- Barriers to health care access can contribute to inadequate health service delivery, unmet health care needs and poorer health outcomes (Pappa et al 2013)
Barriers to health care access are particularly evident in regional Australia, thus creating health inequities for regional populations.

To what extent health workforce maldistribution contributes to these health inequities is unclear.

A detailed description of the total health workforce in regional Australia is lacking.

Regional South Australia presents an important starting point for this work as it has one of the highest rates of chronic disease, co-morbidity, psychological distress, and fair/poor health status of any Australian State/Territory (ABS 2015).
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Methodology

- **Design**
  - Secondary analysis of ABS Census of Housing and Population data (2001-2016)

- **Objectives**
  - Describe the (a) sociodemographic characteristics, (b) skill-mix and (c) distribution of the health workforce in regional SA
  - Compare the characteristics of the regional SA health workforce with that working in metropolitan SA
  - Describe health workforce trends over time
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Methodology

- **Variables**
  - Sociodemographic characteristics (*age, sex, birthplace, marital status, number of children, indigenous status, English language proficiency*)
  - Skill-mix (*occupation [n=47], highest qualification*)
  - Employment characteristics (*labour force status, employer type, hours worked per week, weekly gross income*)
  - Distribution (*remoteness area [ASGC], tourism region, local government area [n=54], industry of employment*)
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Methodology

- **Rationale for using ABS Census data**
  - Large sample sizes and high response rates (>95% for past 15 years)
  - Provision of data for 47 health professions
  - Provision of comparable workforce data for the past 15 years
  - Reports person’s actual occupation at the time of the survey
  - Preferred data source for WHO global health workforce statistics
  - Ease of accessibility and low cost of data
Demographic characteristics
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Age profile (aged 50+ years)

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Sex profile (% female)

![Bar chart showing the proportion of total workforce (% female) over years 2001, 2006, 2011, and 2016 for metropolitan and regional areas. The chart indicates a slight increase in the proportion of females in the workforce over the years.]

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Labour force status (% employed full-time)

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Highest qualification (% degree qualified or higher)

Distribution
Registered Nurses

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Registered Nurses

Global comparison of provider population ratios (per 10,000 population)

Data sources: ABS 2016; Eurostat 2018; OECD.Stat 2018; WHO 2018

PPR: Provider per population ratio (per 10,000 population)
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Registered Midwives

Provider population ratio (per 10,000 population)

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General Practitioners

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General Practitioners
Global comparison of provider population ratios (per 10,000 population)

PPR: Provider per population ratio (per 10,000 population)

Data sources: ABS 2016; Eurostat 2018; OECD.Stat 2018; WHO 2018
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Pharmacists

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Optometrists & Orthoptists

Provider population ratio (per 10,000 population)

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Physiotherapists

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Clinical Psychologists

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Podiatrists

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Massage Therapists

Provider population ratio (per 10,000 population)

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All professions in regional SA

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Key findings

- Health workforce distribution in regional SA has improved in the last 15 years for most health professions
- Health workforce distribution in regional SA is not dissimilar to that reported in other OECD countries
- A large health workforce maldistribution for most health professions is (and continues to be) evident between regional and metropolitan SA
- The regional SA health workforce appears to be an ageing, lower-qualified female–dominant, largely part-time and professionally diverse workforce
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Implications

- Need to better understand the factors contributing to changes in health workforce maldistribution in regional SA
- Need to determine the ideal health workforce skill-mix and distribution (i.e. provider population ratios) for regional and metropolitan centres
- Need to map health workforce supply against health care need
- Need to replicate this work in other Australian States and Territories, and internationally
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