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# POLICY OPTIONS

## ‘Rurality’ and community amenity: How they relate to rural primary care supply and workforce retention

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## Policy context

Primary care physician workforce (i.e. GPs in Australia) supply disparities between rural and metropolitan areas remain a significant problem. Whilst many studies identify important factors relating to failure of rural workforce retention or recruitment, rarely has this been quantified to distinguish differences or patterns associated by geography.

Maldistribution of the rural primary health care workforce remains highly problematic despite large investments in various rural health policies and programs. As such, there is a clear need to understand why it is that some rural locations have chronic shortages and/or increased workforce turnover whilst other rural locations have few difficulties.

Doctor’s location decisions relate both to meeting their professional needs and interests, and to meeting their non-professional satisfaction through, amongst other aspects, various place-related attributes. Whilst the recent adoption of the Modified Monash Model is a recognition that place characteristics, in addition to remoteness, are important determinants of retention there is potential to further discriminate aspects that make one location more ‘attractive’ to primary care doctors than other locations which affect both the supply and retention of its workforce.

This study thus focused on two related projects which both investigate the role of ‘rurality’ and community amenity aspects with, in turn, rural primary care workforce supply and retention. More specifically:

- Study 1 aimed to describe the geographic mobility patterns of US rural primary care physicians. In particular, it quantifies, over an extended period, where turnover and mobility of rural physicians occurs and investigates the moderating effect of both area-level and individual-level factors on observed rural retention.
- Study 2 used data from both Australia and the US, including my Australian Index of Access, to investigate the extent to which variations in community amenity aspects explain spatial variations in the supply of rural primary care doctors.

## Policy options

There are a multitude of medical workforce distribution incentive programs, which are predominantly based on broad definitions of ‘rurality’. In the last 5 years, geographical ‘remoteness’ has been the key tool for identifying eligible locations with a shift in the last 6 months to a combined population size and remoteness system (Modified Monash Model). These studies confirm that smaller population size is significantly associated with both increased mobility (poorer retention in a community) and poorer supply, thus being a key factor for where resources should be targeted.

Poorer supply was also a strong factor associated with poorer retention of rural doctors. Australia has somewhat identified such areas using the District of Workforce Shortage determination (which are defined as those with ‘supply’ below the national average). However, this determination has previously only been used for recruitment policies. Our study confirms that poorer ‘supply’ should also be considered for targeting retention resources. When combined with smaller population size, such communities are highly vulnerable with poorer supply and poorer retention having a large impact where the workforce is already small to begin with. Rural areas which can least afford to lose doctors are those dealing with difficulties of increased mobility and turnover. Improved retention of rural physicians in these communities needs to be a target of health policies.

Furthermore, rural doctor supply and retention are poorer in regions without a nearby hospital in addition to their smaller population. Health policies need to consider the impact on doctors working in such communities, who are likely struggling with the isolation and lack of a critical mass of other health professionals nearby.

Community amenity can also contribute to differences of rural supply, but for the most part did not impact on retention (based on US data). Notably, supply was increased in more educated, affluent and economically attractive areas (measured by housing price). Our data also confirmed the popular notion of the pull of the coast, with such areas having significantly higher supply. Community characteristics such as these are not amenable through policy; however, rural areas that have low community amenity may require targeting of resources to compensate for their reduced ‘attractiveness’.

Continued maldistribution of the rural primary care workforce suggests that the current policies and solutions are not effective shortages in some areas. ‘Rural’ communities of the same population size and/or remoteness should not be assumed to be one and the same for all non-metropolitan areas. Policies need to place a greater focus on rural communities that may be less amenable to doctors wanting to work and/or live there.

# Key findings

- Using 14-years of US primary care data, biyearly turnover of younger rural physicians was around 20%, of which 15% moved to metropolitan practice, compared to 9% and 6% for older rural physicians.
- Regions containing a hospital, of larger population size and with increased physician supply were associated with higher county-level retention and fewer individuals leaving rural practice. That is, rural areas which can least afford to lose physicians are those dealing with difficulties of increased mobility and turnover.
- Demonstrated using both Australian and US primary care supply data, the rural medical workforce are distributed with bias towards more affluent and educated areas, whilst supply is more problematic in smaller, poorer and more isolated rural towns which are struggling to attract adequate supply of primary care services.
- Consistent with US mobility data, increased supply is found in regions characterised by larger rural communities and those with a hospital nearby.
- Future primary care workforce policies need to place a greater focus on rural communities that, for a variety of reasons, may be less amenable to doctors wanting to begin or remain working there.

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