**Title**
Does the rural pipeline influence rural General Practitioner (GP) practice location and retention? A systematic review.

**Background**

There is currently a shortage of GPs in rural and remote locations in Australia. Research into factors influencing a GP’s decision to practise rurally suggests that doctors with a rural background are more likely to practise in rural areas. However other influential factors include rural exposure during undergraduate medical training and vocational GP training. Given the implementation of recent government initiatives to increase recruitment and retention of rural Australian GPs, through supporting the increase of rural clinical exposure in undergraduate and postgraduate medical education, there is a need to synthesize the existing evidence and communicate this to policy-makers.

**Aims**

Summarise the quantitative evidence for the association between rural pipeline factors (rural background, rural clinical exposure during medical school and vocational training) and rural practice by systematically reviewing national and international published and unpublished reports.

**Method**

A systematic literature search was conducted for studies providing a clear and quantitative comparison of rural and urban GPs with and without a history of rural pipeline factors, including studies examining the relative importance of these factors in rural practice/retention.

**Results**

Following a systematic search and formal screening of search results against eligibility criteria, 26 observational studies involving a quantitative analysis of rural pipeline factors and rural practice were identified. Quality assessment of observational studies identified the majority of evidence ranged from satisfactory to very good quality.

**Conclusion**

Major findings of the review following synthesis of quantitative data will be discussed, including evidence of association between rural pipeline factors and rural practice. Implications of findings will also be discussed.