Reviewer’s report

Title: Family effects on the rurality of GP's work location: A longitudinal panel study

Version: 0 Date: 22 Aug 2017

Reviewer: Marieke Kroezen

Reviewer's report:

General comments:

Overall this is a robust study, with good data, and well written down. While the topic is not very innovative, and the results may be as expected, recruitment and retention of GPs in rural areas remains an urgent issue without a definitive solution so far. I have two main comments/suggestions:

Comment 1.

Because the knowledge is not very innovative, I think it would benefit the paper tremendously if it would focus more on the implication-side of its findings. What can (local) policy do to improve retention rates of those GPs who are found to leave because of the non-professional factors that were studied in the paper? What can the educational field do? Or the GP professional bodies? In the discussion, some suggestions are made, but these can be considered weak. For example, on pg 12 (lines 260-262) mentioning is made of financial compensation. It is well-known that financial incentives 99% of the time do not work. This was confirmed by the large study "Recruitment and retention of the health workforce in Europe" (which also included cases from Australia). See Kroezen et al. (2015) "Recruitment and retention of health professionals across Europe: A literature review and multiple case study research", Health Policy, 119: 1517-1528. It is clearly stated that based on a review of R&R interventions (with one topic focusing on Attracting and retaining GPs to strengthen primary care in underserved areas): "financial incentives alone, often put in place to attract health workers to underserved areas, are unlikely to achieve their goals and are more effective if combined with other types of measures".

So I would urge the authors to dive a bit deeper into R&R interventions, with proven effectiveness, that may fit well with the outcomes of this paper.

Comment 2

The authors find some interesting differences between male GPs and female GPs. But again, explanations provided are weak. One important factor that is missing, in my view, is the fact that
most female GPs work part-time. This may be an important explanation why there is no association with work location for female GPs when their children reach secondary school, while there is an association for male GPs with work location when their children are in secondary school. Because a part-time job can be easier combined with children going to secondary school than with younger children. However, for full-time jobs (male GPs) the combination is always problematic, of course. This explanation may also give clues for successful R&R interventions (e.g. opening up more possibilities for shared practices and part-time work, especially with the feminization of the GP workforce).

One small comment:

In the background section, on pg 5 (lines 89-99) no numbers are mentioned and no references on 1) the number of schools and 2) the quality of rural schools and universities compared to metropolitan areas. I'm sure a country as Australia has these available, and it would be interesting to mention them to see whether we are dealing more with a perceived problem or a real problem.

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