Author’s response to reviews

Title: Hypothesis: Improving literacy about health workforce will improve rural health workforce recruitment, retention, and capability

Authors:

A Martiniuk (amartiniuk@georgeinstitute.org.au)
Richard Colbran (rcolbran@nswrdn.com.au)
Robyn Ramsden (rgwaghome@gmail.com)
Dave Karlson (dkarlson@nswrdn.com.au)
Emer O’Callaghan (eocallagh@nswrdn.com.au)
Estrella Lowe (elow@nswrdn.com.au)
Michael Edwards (medwards@nswrdn.com.au)
Sharif Bagnulo (sbagnulo@nswrdn.com.au)
Imogene Rothnie (irothrie@nswrdn.com.au)
Laura Hardaker (lhardaker@nswrdn.com.au)
Bernadette Gotch (bgotch@nswrdn.com.au)
Arna Wotherspoon (awotherspoon@nswrdn.com.au)

Version: 1 Date: 06 Nov 2019

Author’s response to reviews:

Nov 1 2019 Martiniuk Response to reviewer comments

Nov 2 2019 Martiniuk revised the manuscript again in keeping with formatting requirements of the journal

HRHE-D-19-00156

Hypothesis: Improving literacy about health workforce will improve rural health workforce recruitment, retention, and capability
Reviewer #1: Overall the manuscript topic (health workforce literacy in rural health) is of merit - however, multiple conceptual issues require addressing for this manuscript to make a contribution. Specifically, the framing of the manuscript as as 'Hypothesis' and the claim that 'health workforce literacy' is a new concept is misleading and de-contextualised.

Firstly, the phrase 'Hypothesis' - while intriguing - is mis-leading - possibly 'assumptions' may be more accurate - as hypothesis gives the topic a strange quantitative feel - in a topic (health literacy) that is very complex, dynamic and has systems properties. Furthermore, no attempt is made to articulate counter - hypotheses. We advise further reflections by authors on this phrasing.

Health workforce literacy versus literacy ABOUT health workforce:

We agree that the concept of ‘health workforce literacy’ exists, and we have now included new text and context (in terms of existing literature) in our revised manuscript. Our understanding of the existing literature is that ‘health workforce literacy’ refers to the health workforce and the literacy they have (whether that be system level, such as understanding other job roles, understanding the system they work within, or understanding how to explain complex medical concepts to patients).

Whereas our paper was aiming to extend the concept, instead being about literacy ABOUT health workforce – that includes the entire health system but also goes BEYOND the health system (including for instance: local government, real estate agents, primary and high schools, café’s etc) hypothesising that if the literacy (knowledge/understanding/power to act) was increased amongst these wider stakeholder groups that it might be possible to increase in particular, rural primary health workforce recruitment, retention, capability, quality of life etc.
Our approach is action orientated and will include consideration of methods to engage users who are not considered traditional health workforce.

Rationale for a Hypothesis paper:

We have used the phrasing Hypothesis as this is an article type supported by the journal Human Resources for Health where this paper was submitted. But also because our hypothesis is that by improving literacy about health workforce measureable benefits with respect to rural health workforce would follow (eg improvements in rural health workforce recruitment, sustainability, capability, quality of life). We believe it does suit a hypothesis paper as it is an idea that is yet untested. The testing of this hypothesis will be quantitative. The counter hypothesis is that improving literacy about health workforce makes no measureable improvement on any workforce outcomes. Our hypothesis is not about whether there should be a term “literacy about health workforce” but that we hypothesise that improving literacy about health workforce that this may improve crucial outcomes (eg recruitment etc).

Secondly, with regard to authorship - more detailed information is required on the 12 authors - as it is very unclear what there [their] contributions are, what lens/perspectives they have - that have informed hypotheses?

Thank you for this comment. We agree that a reader would benefit from knowing the contributions and perspectives of the 12 authors. We have now included this as a revised “Author Contributions” section. However we also seek the advice of the editor - as the originally included authorship list had roles of each author which is slightly repeated in the new, expanded, author contributions. All authors worked together to inform this hypothesis paper.

Thirdly, the manuscript appears de-contextualised - with minimal acknowledgement and recognition that while within rural health - the concept of health workforce literacy may not be a central discussion point - more broadly health workforce literacy is and has been widely debated and discussed. The authors need to reflect upon all the work that has occurred within 'Health Workforce Planning' - where the health workforce recruitment, retention and capability - have been written about from a health systems literacy lens. Furthermore, entire Journal Issues have been devoted to Health Workforce literacy eg Aust Health Review from an allied Health lens. Within the mental health arena- Mental health workforce literacy has been discussed. Within the Health Care Coordination arena- health workforce literacy has been discussed. It is important to further point out that the authors appear to briefly recognise the importance of Organisational Health Literacy frameworks and approaches that also include a focus on the 'Health workforce'. With regard to health workforce literacy capability the authors are advised to reflect upon health workforce preparation and ongoing professional development.

We thank reviewer 1 for their insights into this topic. We have revised the manuscript based on these helpful comments. The revisions are throughout the revised manuscript, in red font for ease of reading. We have also included 3 new references based upon recommendations made by Reviewer 1.
We are aware of the literature regarding health literacy, from an individual patient, health provider, organisation and systems lens. We are also aware of the literature regarding frameworks and approaches to embed health literacy into health systems. Due to this being a short Hypothesis/Commentary paper submission we did not summarise this existing literature in detail. Instead, we aimed to express a testable concept that could take systems-level/organisational literacy just that next step further. In particular, our NSW Rural Doctors’ Network co-authors feel strongly there is a gap in ‘real delivery’, implementation or what one might call knowledge into action – regarding literacy about health workforce – and the aim of this paper is to extend the existing ideas of organisational, system and workforce literacy to the concept of “literacy about health workforce” which we feel is unique and thus far not specifically or sufficiently explored in the literature. It is unique because it focuses on systems beyond health, is about improving literacy about workforce (not about health, and not about improving health workforce’s literacy). It is a hypothesis that improving literacy about workforce could improve rural health workforce recruitment, retention and capability. Our paper is aimed at creating an initial foundation (ie the hypothesis) extending existing concepts of literacy into specific, actionable and testable activities to achieve specific outcomes of workforce recruitment, retention and capability.

We do believe the concept we are proposing sufficiently extends existing concepts and literature in the health literacy arena. For instance, we could not find any mention of literacy about health workforce in the following documents: The Australian National Health Workforce Strategic Framework, the Australia’s Health Workforce - Productivity Commission, or the 2013 Review of Australian Government Health Workforce Programs. We also could not find any articles specifically about literacy regarding the mental health workforce. When we use the term literacy regarding the mental health workforce we are aiming to expand the typical use of literacy (so we do not mean improving the literacy of the mental health workforce, or the literacy of the community about mental health, for which there are multiple publications); we are referring to a scope of literacy about the WORKFORCE (which could include improving literacy/knowledge regarding: titles, job roles, distribution, recruitment strategies, organisations who support workforce, knowledge regarding what the workforce seeks etc).

Thank you, as we have also now reviewed the 50+ articles in the Australian Health Review (mentioned by the reviewer) with the word “literacy” in the title or abstract (along with other literature reviewed). Systems-level health literacy is the closest to the concept we are proposing for discussion and testing. However, we continue to propose that our paper contributes unique thinking in that it is about “literacy ABOUT health workforce” (not health workforce literacy which is an existing and well described concept). The rationale for discussing and hypothesising “literacy ABOUT health workforce” as a unique concept (yet certainly situated amongst existing concepts and literature in health literacy) is that it includes: an even broader set of stakeholders (going beyond health), different literacy and with specific aims (eg improve recruitment, retention and capability of health workforce) ultimately to improve upon individuals’ and population health outcomes.

The newly summarised term “organisational health literacy” (Meggetto et al, 2018) appears to discuss a similar concept to “literacy ABOUT health workforce” however continues to refer to “organisations within the health system” and the concept we are proposing - refers to both
organisations within the health system but, arguably more importantly, organisations outside of the health system.

The key difference in our thinking compared to the existing literature - is that improving literacy about health workforce may have positive impacts upon communities’ ability to recruit, and retain a capable (and appropriate and happy etc) health workforce.

We did find one reference indicating the importance of improved literacy about the different roles of health care worker in the health workforce; stating: “a shared understanding of the roles and contributions of the different workforce professions, organisations and systems, among patients and indeed the health workforce is required.” (Naccarella et al, 2016 April). We agree this is required, however this is not describing fully the concept which we are aiming to describe.

We are hypothesising specifically that increasing the literacy ABOUT health workforce within the wider system ie beyond health (to include community members, the mayor of a town, real estate agents etc) ---about (eg roles, needs, capabilities, competencies, recruitment, retention, sustainability) -- that this improvement in literacy about health workforce may ultimately lead to improvements in recruitment and retention of the appropriate and capable health workforce in areas that have been typically challenging to service (eg rural and remote towns).

New references included in our revised manuscript are:


Reviewer #2: The article is very important and very good explanation has been provided for the need of health literacy. However, if some more scientific references are provided to link to the importance of health literacy will overall improve the hypothesis. I see some paragraphs are written without any references, does those indicate authors own thoughts?. In addition how do you plan to test your hypothesis?.

We thank reviewer 2 for their comments and we agree that this is an important idea. We have included several new scientific references as detailed above in our response to Reviewer 1. Any writing which is not referenced represents the ideas, thoughts and unique contributions of our co-authorship team.
We have extensive and developing plans to test our hypothesis however the structure of the hypothesis paper in this journal would not enable such detailed discussion due to word count limits.

We have added the following to the revised manuscript:

While still under development, we have begun to explore approaches to testing the hypothesis that improving literacy about health workforce will improve the recruitment, retention and capability of the rural health workforce. Some potential approaches which we may use to test this hypothesis include: a) case study methodology using existing routinely collected data, b) qualitative in-depth interviews with a broad range of stakeholders in the rural primary health system, and c) development and testing of a “program” to improve literacy about rural health workforce – eg in a cluster RCT design, or stepped-wedge RCT design to assess whether improving literacy about the rural health workforce can improve upon the outcomes (such as: recruitment, retention, and capability of the rural health workforce).

Reviewer #3: The topic is highly relevant in the development of HRH around the world. The author raised one of the challenges in HRH and Health system as described, poor understanding of the concept and its components. My questions to the author is why they said hypothesis? How one can test it? Follow up questions are, Is that not possible to define it directly from available literature? Including framing up its components? And also showing the linkages among them as well as with the other components of the Health system.

We agree with Reviewer 3 that this topic is highly relevant in the development of HRH around the world as several members of our authorship team have also conducted research on HRH in other high-income as well as low and middle-income countries. This concept is both locally and globally relevant.

Please see our response to reviewer 1 and 2 regarding why we have proposed this as a Hypothesis, and how we can test it.

While the existing literature defines health workforce literacy, and the existing literature has started to discuss system-wide literacy in health – our co-authorship team believes that the unique and specific concept of literacy ABOUT health workforce in the wider system (within and beyond health) has not been previously conceptualised, discussed, defined or tested. Our co-authorship team includes multiple authors for whom their daily task (for years) has been in the recruitment, retention and support of the capability of the rural primary care workforce in Australia and our co-authorship team is vehement that this concept of literacy about health workforce is not discussed, defined, measured and is yet to be tested as to its efficacy and effectiveness. Yet the co-authorship team believes (and has initial case study data) that this concept holds good promise, and in combination with existing strategies – may further improve communities’ abilities to recruit, and retain a capable rural health workforce.
It is useful that a growing body of literature and evidence exists around health literacy in general. This will certainly be mirrored/extended in the growth of this more detailed/specific concept of literacy about health workforce. Yet we believe this has not been done yet, and our review of the literature indicates this specific concept has not yet been explored or tested. There are certainly linkages amongst the existing literature and actions regarding system-wide health literacy, workforce health literacy, patient health literacy and this more specific extension of literacy ABOUT the health workforce and our future work will be (and has started) in this space.

Why does this specific version of health literacy need to be defined and tested you might ask?

While health literacy is a growing field, we have not seen any dissemination of information from the health literacy field into the “literacy about health workforce” arena. Literacy about health workforce deserves its own discussion and definition because: it refers to different stakeholders (beyond the health system), refers to same but an extended knowledge base (eg workforce capability and satisfaction), requires education and training in different topics (eg how to support a GP’s partner, or place their children in school or why health professionals take up particular job posts) and has specific and unique outcomes of interest (eg recruitment, retention and capability of the rural health workforce).

Finally: I suggest if the author go directly to the concept and it's need in the system as a whole by developing a theoretical framework. This might be a groundbreaking to go one step further for its development.

We agree a theoretical framework is the step – and this is the step we are currently working on and have plans to submit this for peer-review in the near future. However, we opted to initially submit the idea as a hypothesis paper as we aimed to stimulate discussion and ideally to improve linkages with others working in this field, with hopes to ultimately collaborate and/or lead thinking regarding a theoretical framework of literacy about health workforce as well as future evaluation/testing of the hypothesis that improving literacy about health workforce by the broader ‘system’ (within and beyond health) will ultimately improve the ability of fragile health systems (eg in rural communities) to recruit, and retain a capable health workforce. [As well, the word count of a Hypothesis paper or any short report, would be insufficient for an exploration of the hypothesis as well as a theoretical framework so we have not been able to include such a framework in this paper].