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Title

Developing the rural health workforce to improve Australian Aboriginal health outcomes: a systematic review.

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Abstract

Objective: The aim of this study was to identify evidence based strategies in the literature for developing and maintaining a skilled and qualified rural and remote health workforce in Australia to better meet the health care needs of Australian Aboriginal and/or Torres Strait Islander (hereafter Aboriginal) people.

Methods: A systematic search strategy was implemented using the PRISMA statement and checklist. Exclusion and inclusion criteria were applied, and 26 papers were included in the study. These 26 papers were critically evaluated and analysed for common findings about the rural health workforce providing services for Aboriginal people.

Results: There were four key findings of the study: the experience of Aboriginal people in the health workforce affects their engagement with education, training, and employment; particular factors affect the effectiveness and longevity of the non-Aboriginal workforce working in Aboriginal health; attitudes and behaviours of the workforce have a direct effect on service delivery design and models in Aboriginal health; and student placements affect the likelihood of applying for rural and remote health jobs in Aboriginal communities after graduation. Each finding has associated evidence-based strategies including those to promote the engagement and retention of Aboriginal staff; training and support for non-Aboriginal health workers; effective service design; and support strategies for effective student placement.

Conclusions: Strategies are evidenced in the peer-reviewed literature to improve the rural and remote workforce for health delivery for Australian Aboriginal people and should be considered by policy makers, funders and program managers.
What is known about the topic? There is a significant amount of peer reviewed literature about recruitment and retention of the rural and remote health workforce.

What does this paper add? There is a gap in the literature about strategies to improve recruitment and retention of the rural and remote health workforce for health delivery for Australian Aboriginal people and this paper provides evidence-based strategies in four key areas.

What are the implications for practitioners? The findings in this paper are relevant for policy makers, funders and program managers in rural and remote Aboriginal health.
Introduction

Aboriginal Australians experience an unacceptably high burden of chronic disease (1). For the purposes of this paper the term Aboriginal is used to refer to Australian Aboriginal and/or Torres Strait Islander people. Chronic disease is a primary driver of the ten year gap in life expectancy between Aboriginal and non-Aboriginal Australians (1, 2). In 2008 the Council of Australian Governments made a commitment to close the gap in health and life expectancy between Aboriginal and non-Aboriginal Australians by 2030. At the time the life expectancy gap was 17 years. The Government subsequently agreed that given the gravity of the health status of Aboriginal people, the Prime Minister of Australia would to provide an annual report on progress to the Parliament. The Closing the Gap Report provides an annual update on progress in areas of health, infant mortality, early childhood and educational readiness and achievement (2).

Aboriginal people living outside of urban areas experience increased prevalence of complex, chronic disease than those in urban areas (1, 3). The 2011 census showed that 67% of Aboriginal people live outside of capital cities (4). The demands of delivering health care services and maintaining clinical skills in a rural or remote context are well documented (5-7). The health workforce is fundamental to the delivery of health care for Aboriginal people in rural and remote communities (6, 8, 9).

There is considerable literature about developing and sustaining the health workforce in rural and remote communities however evidence about factors that positively contribute to sustaining the health workforce is limited and often inferred from the identified issues and barriers (10-12). It is known that there are differences between health professionals in terms of what motivates
them to stay working and living in rural and remote areas (13). For example doctors are motivated by career and service aspirations and financial incentives (14, 15). Nurses are retained through relationships with colleagues and communities and management approaches (16), while allied health professionals appreciate the challenge and diversity of work roles in rural communities and personal factors associated with rural living (13). For all health professionals access to supervision, professional support and continuing professional development are important retention factors.

There are additional factors associated with developing and sustaining the rural and remote health workforce to meet the needs of Aboriginal people and communities (17). The cultural competence of health care services and professionals is associated with the likelihood that Aboriginal people will access those services (3). Therefore, the recruitment, development and retention of a culturally competent health workforce is important in meeting health care needs of Aboriginal people (18). Given this, potentially, confidence and competence in working with Aboriginal people may contribute to retention of health professionals in rural and remote communities.

The purpose of this study was to identify the evidence based strategies in the literature for developing and maintaining a skilled and qualified workforce to meet the health needs of Aboriginal people in rural and remote Australia. The findings of this study will be significant in designing and implementing sustainable health workforce strategies which improve the cultural competence, quality and quantity of health care services available and contribute to closing the gap in life expectancy for Aboriginal people living in rural and remote Australia.
Methods

A systematic literature review guided by the PRISMA statement (19) was undertaken utilising three major online databases: PubMed OVID, Medline and CINAHL. The search terms developed by the Lowitja Institute to identify all papers relating to Australian Aboriginal and/or Torres Strait Islander people were applied as the primary search terms and 9079 papers were found (20). The terms health or health programs were searched separately and 5,289,407 papers were identified. The term workforce was then searched and 105,364 papers were identified. When the primary search terms for Aboriginal people were added to health or health program and workforce, a total of 59 papers were identified.

A total of 59 papers were found in the initial search. Additional sources were not accessed in this study as the authors was explicitly seeking peer reviewed literature and evidence-based strategies. The titles and abstracts of these papers were reviewed. Twenty two papers were excluded because they were duplicates. The full text of 37 papers were reviewed against the inclusion criteria which were: published between 2000 and 2015, contained quantitative or qualitative data relating to Aboriginal people, and health or health related services and workforce. Twenty-six papers met the criteria and were included in the study. The 26 papers were then reviewed in relation to developing and maintaining a skilled and qualified rural and remote health workforce in Australia. Four findings emerged.

Results and Discussion

Broadly, the systematic review found that there are not enough skilled and qualified clinicians to meet the needs of Aboriginal people in rural and remote Australia (7-9, 21-24). It was also found
that the existing workforce distribution is uneven (21, 22), the non-Aboriginal workforce is ageing (8, 23), Aboriginal people make up a small proportion of the health workforce and face significant challenges entering and staying in the health workforce (12, 17, 24), and the cultural competence of the existing health workforce is variable (25, 26). The primary strategies identified to address these issues are to: promote rural and remote Aboriginal health practice to students; to provide additional support such as training, improved cultural competence, and peer mentoring to the existing health workforce; and to develop and support the Aboriginal health workforce at a local level.

Four key findings emerged from the peer-reviewed literature: Aboriginal people in the health workforce have particular challenges that impact on their engagement in education, training and employment; there are particular factors which impact on the effectiveness and longevity of non-Aboriginal staff working with Aboriginal people in rural and remote health; the attitudes and behaviors of the workforce has a direct impact on service delivery design and models in Aboriginal health; and student placements in Aboriginal health in rural and remote areas impact on post-graduation job choice. The number of papers relating to each of these findings is displayed in Table 1.
Table 1: Summary of Findings

<table>
<thead>
<tr>
<th>Finding</th>
<th>Description</th>
<th>Evidence</th>
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<tbody>
<tr>
<td>1. The experience of the Aboriginal health workforce</td>
<td>Nine papers examined the experience of Aboriginal people in the rural and remote health workforce, the particular challenges they face, and the strategies for addressing those challenges.</td>
<td>(10-12, 18, 24-28)</td>
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<td>2. The rural and remote workforce in Aboriginal health</td>
<td>Seven papers identified factors impacting on the effectiveness and longevity of the non-Aboriginal and/or non-local rural and remote health workforce and the ways to assist them to be effective in their roles.</td>
<td>(6-9, 21-23)</td>
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<td>3. Workforce and service delivery models</td>
<td>Seven papers examined workforce strategies used in Aboriginal health service delivery or specific programs.</td>
<td>(3, 4, 29-33)</td>
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<tr>
<td>4. The impact of student placements</td>
<td>Three papers examined the impact of providing rural and remote placements in Aboriginal communities for students on their post-graduation employment choices.</td>
<td>(34-36)</td>
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Finding one – The experience of the Aboriginal health workforce

Nine papers examined the experience of Aboriginal people in the health workforce and identified that they are likely to face challenges such as racism, family and community responsibilities, isolation, stress, and poor secondary education (10-12, 27). At the same time, Aboriginal people in the health workforce are likely to have a positive impact on the patient experience of the health care service which may in turn improves trust, attendance at appointments and acceptance of assessment and treatment recommendations (11, 18, 24-26, 28). All nine papers identify the importance of the Aboriginal health workforce and the need to provide specific support such as education, training, mentoring, cultural and family leave provisions and peer support to addresses the significant issues they face. Equally important are explicit strategies for acknowledging, preventing and dealing with racism; strategies to promote team cohesion and cooperation; recognition and respect of different knowledges (for example: medical, cultural, community); and ongoing cross cultural training.

There are two broad strategies in the literature to increase the representation of Aboriginal people in the health workforce. The first relates to pathways to training and qualifications, and the second relates to the inclusiveness and cultural safety of the workplace, and the cultural competence of the team.

Increasing the representation of Aboriginal people in the health workforce requires explicit pathways and strategies in schools and universities for Aboriginal people to gain and/or upgrade their qualifications. Whilst the barriers to higher education are well understood, programs are rarely designed to address them. The five enablers for tertiary education detailed by West et al...
(28) should be independently evaluated for effectiveness in engaging Aboriginal students and the subsequent impact on retention, completion and employment.

Issues such as racism, respect of different knowledges (cultural/community/clinical), team work, and family and cultural leave provisions can be readily addressed through culturally competent human resources policy and practice, backed by a strong culture and leadership of inclusion and respect.

Finding two – The rural and remote health workforce in Aboriginal health

Seven papers in the study identified factors impacting on the effectiveness and longevity of the non-Aboriginal and/or “non local” rural and remote health workforce. Longevity is used in this paper as a catch all term. The literature uses a range of terminology including retention, turnover, churn, and attrition. The factors that promote longevity in this review fell into three broad categories, firstly: clinical experience, qualifications, and skills; secondly: access to professional development, supervision and peer support; and thirdly: interpersonal communication, cultural competence and perceived connectedness with the rural or remote community (6-9, 23). The first set of factors can be readily determined through the job design and the recruitment process. The second and third can be developed if there is willingness on the part of the employee and employer, and with timely and on-going access to training and professional development (8, 21, 22). The literature in this finding emphasises the importance of the relationships between the health worker and the local community, including local Aboriginal communities; and the relationship between the health worker and their peers, including Aboriginal peer mentors, to ensure that the worker is supported professionally and culturally in
their role. All of the papers identified the need to improve the supply, distribution and support of skilled health clinicians and workers in order to improve the availability of Aboriginal health services in rural and remote Australia.

This finding is consistent with the general research findings on retention of the rural and remote workforce (13). Relationships between the worker and the community; Aboriginal peers/mentors; and clinical networks all impact on the longevity of the Aboriginal health workforce and is strongly evidenced in the literature in this finding.

Finding three - Workforce and service delivery models

Seven papers in the study examined workforce strategies used in Aboriginal health service delivery or specific program outcomes including mental health, chronic disease management, family violence and health promotion. All of the papers in this area identified the significance of the relationships and engagement between Aboriginal and non-Aboriginal staff, and the importance of an empowered, supported, and skilled Aboriginal health workforce (3, 5, 29-33). In addition, the papers in this area explored the special training and support needs of particular groups of workers to effectively implement health programs. For example, Kowanko et al (2004) details the importance of training the entire health team in mental health and safe medication management, as well as the specific issues associated with medication adherence and risks for Aboriginal people (31). Lauw et al (2013) details a family violence prevention and treatment training program for health workers and the importance of acknowledging the participants’ potential history as a victim of violence within the training process itself (32). The Importance of designing and delivering training which targets both the needs of the health work force (ie
specific skills and knowledge related to the health program), and the intended patient group (ie
what are the particular characteristics of the target patient group and how can their needs be
best met by the health worker) is highlighted.

The papers in this area traverse domestic violence, chronic disease management, mental health
and health promotion, yet all detail the criticality of working together as a team, valuing the
different skills workers bring and understanding the target patient group in order to implement
the program effectively for Aboriginal people.

Finding four - The impact of student placements

Three papers included in this study examined the impact of providing rural and remote
placements in Aboriginal communities for students on their post-graduation employment
choices. All papers found that placing students in a Aboriginal, rural and remote health context
was likely to impact positively on their learning and may contribute to the rural and remote
health work force supply over time (34-36). All of the papers emphasized the importance of
student placement being properly established, supported, resourced and supervised.

The three papers in finding four are consistent with the broader literature about the value of
student placements in rural and remote health services (37). In the same way that well planned,
supported and supervised student placements impact positively on the likelihood of a graduate
choosing to work in rural and remote health, they also increase the likelihood that students will
choose to work in rural and remote Aboriginal health if they have had a positive experience. The
additional benefit of placement in Aboriginal health is the increase in cultural competence of the
graduating student.
The four key findings and the associated literature are summarized in Table 1.

The evidence based strategies identified in this systematic review are relevant for funders, policy makers and program managers seeking to develop and sustain an effective health workforce in rural and remote Australia, and close the gap in life expectancy for Aboriginal Australians.

This systematic review only examined literature from Australia and this may be seen as limiting. However, the uniqueness of Aboriginal culture and Australian history and context are such that focusing only on the Australian literature was deemed by the authors more likely to identified evidence strategies relevant to the Australian rural and remote context and Aboriginal populations.

**Conclusion**

The rural and remote health workforce in Australia is declining and urgent action is required to address the current uneven and insufficient supply (7-9, 21, 22). This is not a new issue. Four findings emerged in the study, each of which detail the barriers to and strategies for improving the quantity, quality, stability and longevity of the rural and remote health workforce for Aboriginal communities. The literature provides evidence based strategies that are likely to increase the number of qualified, skilled and effective staff to provide much needed health services for Aboriginal people in rural and remote areas. A sustainable and highly skilled rural and remote health workforce is fundamental to closing the gap in life expectancy for Aboriginal Australians. Strategies are evidenced in the peer-reviewed literature and should be considered by policy makers, funders and program managers.
References
