



# Literature Review Supporting the transition of Allied Health Professionals to Remote and Rural Practice

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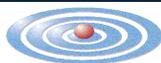
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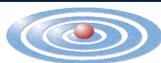
### Acknowledgements

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## Table of Contents

<b>Executive Summary</b>	
Context of the review	4
Objectives of the review	4
Conduct of the review	5
Core issues identified from this review	5
<b>Introduction</b>	
Background and Rationale for the review	8
Objectives of this review	8
Research questions to be addressed in this review	8
Outcomes from this review	8
Advisory groups	9
<b>Results</b>	
Review question one	10
Review question two	12
Review question three	15
<b>Summary of Evidence</b>	24
<b>Limitations</b>	25
<b>Core learning</b>	26
<b>References</b>	28
<b>Appendices</b>	
Appendix One: Data Extraction Forms	33
Appendix Two: Methodology	
• Criteria for considering research for this review	34
• Types of Studies	34
• Search strategy for identification of studies	34
• Peer reviewed databases	35
• Key words	35
• Pearling	35
• Literature extraction	35
Appendix Three: Figures	
• Figure 1: Research paradigm of retrieved publications	37
• Figure 2: Geographical distribution of retrieved publications	37
• Figure 3: Health discipline distribution of retrieved publications	37
<b>List of Tables</b>	
Table 1 Summary of challenges faced by remote and rural practitioners as identified in the literature	15
Table 2 Summary of programs that prepare and support health practitioners new to rural and remote practice	20



## Executive Summary

### Context of the review

Allied health professionals in remote and rural areas operate in very different working environments compared with their metropolitan colleagues (Bent 1999). They are commonly involved in providing care over a wider variety of areas which gives them the opportunity to become ‘specialist generalists.’ (Arthur, Sheppard and Dare 1995) Apart from this clinical diversity, remote and rural practitioners develop a sense of professional autonomy which could make the practice even more satisfying and rewarding. The relaxed rural environment and the experience of being a valued part of the community add to the professional benefits of working in this kind of setting. However, remote and rural practice also poses numerous personal and professional challenges to clinicians especially those who are new in the practice. It is therefore important for allied health practitioners to be equipped with knowledge, skills and attitude specific for rural and remote practice to ensure efficient and safe delivery of health services. Support programs to complement these competencies should also be in place to minimise the challenges faced by practitioners in providing health services to rural and remote Australia.

The aim of this review is to provide an unbiased literature perspective, based on systematic and rigorous evaluation of the available literature. It is intended that the findings from this review will guide the development of a web-based resource aimed to support allied health professionals as they enter remote and rural practice.

### Objective of the review

Identify the orientation, support and skill requirements for health professionals (particularly allied health professionals) new to rural/remote practice

#### Review question 1:

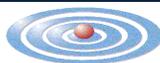
How does allied health practice differ between metropolitan, remote and rural settings?

#### Review question 2:

What additional skills and competencies are required of Allied Health Professionals working in rural/remote practice as compared to those in metropolitan practice?

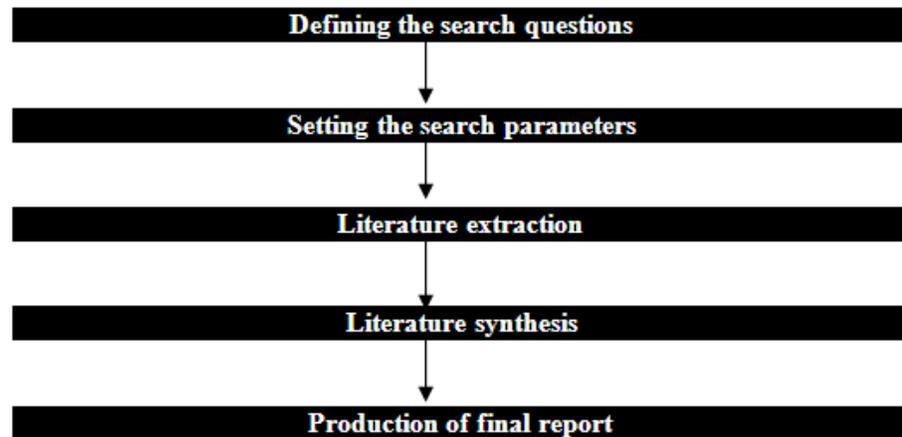
#### Review question 3:

What are the characteristics of programs that successfully prepare\* and support graduate health professionals, including allied health practitioners, new to rural/remote practice? (\*Prepare should include orientation and induction or similar programs)



**Conduct of the review**

The systematic review was undertaken using an iterative, step-by-step approach to ensure transparency and rigour in the review process. Additionally such a process provided the opportunity for project stakeholders to guide the direction of the project and provide valuable insights from their perspective and ultimately ownership of the outcome. The systematic review was undertaken in five discrete, conjoined stages.



**Core learning**

A set of five core constructs are contained in this report. These concepts will provide a framework that will guide the development of a web-based resource aimed to support allied health professionals as they enter remote and rural practice. The competencies required of an allied health professional and the programs that will successfully prepare and support practitioners new to rural practice are described.

**Core learning 1**

There are general characteristics that distinguish remote and rural health practice from the metropolitan, and these can be categorized into: burden of disease, access to health care, confidentiality, cultural sensitivity, team practice, workforce characteristics. Additional features of remote health practice include: geographical, professional and often social isolation of practitioners; inter-professional approach; practitioners requiring public health, emergency and extended clinical skills; cross cultural context; serving small, dispersed and often highly mobile populations; serving populations with relatively high health needs; a physical environment of climatic extremes; communications environment of rapid technological change.

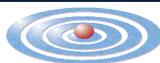
**Core learning 2**

Additional competencies are required of allied health professionals in remote and rural practice and these included extra competencies in clinical, organizational, professional, cultural, team practice, and attitudinal areas.

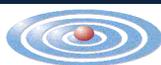
Clinical competencies: wide range of clinical skills; advanced practice skills such as triage and diagnosis; multi-skilling; health promotion, public health and primary health care skills

Organisational competencies: capacity to work in advisory role; good communication and teaching skills; work load prioritization; business skills

Other professional competencies: skills in analysis, planning, submission,



	<p>preparation, implementation and evaluation of service delivery and development; implementation of alternative service models (volunteer schemes, training of multi-purpose health personnel); self-care skills (Stress management); advocacy for role of own profession within the multi-disciplinary team or community; networking; quality and safe management skills; undertake local research</p> <p>Cultural competencies: culturally secure health practice with Aboriginals; specific skills for unique remote community (different language, cultural norms &amp; practices, practical issues); awareness of community structure; understanding of rural ways of thinking and doing</p> <p>Team practice competencies: ability to work collaboratively and leadership skills; skills for trans-disciplinary practice; inter-professional practice</p> <p>Attitudinal competencies: cooperative and collaborative; autonomous; resourcefulness, creativity, reflective and critical of own practice</p>
<p><b>Core learning 3</b></p>	<p>There is substantial evidence from the literature regarding the challenges faced by rural practitioners, which can be grouped into professional, personal and organizational or administrative issues.</p> <p>Professional: High work load; diversity of clients; professional isolation; lack of access to professional development; lack of opportunity for career development; lack of communication system or access to technology; inadequate or absence of orientation; underrepresentation in professional organizations</p> <p>Personal: Lack of socio-cultural facilities; lack of support for family; non-competitive salary; cultural issues; lack of rural incentives</p> <p>Organisational or Administrative: lack of management support; inadequate resource and inappropriate infrastructure; lack of consistency in the organizational structure</p>
<p><b>Core learning 4</b></p>	<p>Competencies of health practitioners should be complemented by support programs in order to minimise the challenges associated with health service delivery in the remote and rural areas. These programs include professional, financial, personal or social, and organisational or administrative support.</p> <p>Professional support: adequate orientation that will facilitate transition to rural practice and integration within the community; opportunities for professional development and networking; development of clear career pathways.</p> <p>Financial support in the form of salary packages, housing allowance, annual leave or additional incentives such as salary sacrifice</p> <p>Personal/social support: education packages or child care support; support services, such as emergency hot lines, retreats or religious support structures, social/recreational centres; opportunities for spouse employment</p> <p>Organisational/administrative support: Employer/organisation-support incentives and initiatives, including staff coverage and locum support, remuneration for time off and paid travel expenses for continuing education; monitoring through staff survey; structured supervision</p>
<p><b>Core learning 5</b></p>	<p>Synthesis of literature evidence indicates that in order for support programs to be effective, strategies need to be coordinated effectively and offered as a package, rather than in a piece-meal fashion. Delivery of services/programs must</p>



be the result of local discussions involving the affected key parties and tailored to their needs. Greater participation by the local community with increased collaboration from all the stakeholders, including the government, may improve support programs.



## Introduction

### Background and rationale for the review

Allied health professionals in remote and rural areas operate in very different working environments compared with their metropolitan colleagues (Bent 1999). They are commonly involved in providing care over a wider variety of areas which gives them the opportunity to become 'specialist generalists.' (Arthur, Sheppard and Dare 1995) Apart from this clinical diversity, remote and rural practitioners develop a sense of professional autonomy which could make the practice even more satisfying and rewarding. The relaxed rural environment and the experience of being a valued part of the community add to the professional benefits of working in this kind of setting. However, remote and rural practice also poses numerous personal and professional challenges to clinicians especially those who are new in the practice. It is therefore important for allied health practitioners to be equipped with knowledge, skills and attitude specific for remote and rural practice to ensure efficient and safe delivery of health services. Support programs to complement these competencies should also be in place to minimise the challenges faced by practitioners in providing health services to remote and rural Australia.

The aim of this review is to provide an unbiased literature perspective, based on systematic and rigorous evaluation of the available literature. It is intended that the findings from this review will guide the development of a web-based resource aimed to support allied health professionals as they enter remote and rural practice.

### Objective of the review

Identify the orientation, support and skill requirements for health professionals (particularly allied health professionals) new to rural/remote practice

### Research questions

#### Review question 1:

How does allied health practice differ between metropolitan, remote and rural settings?

#### Review question 2:

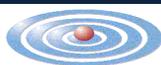
What additional skills and competencies are required of Allied Health Professionals working in rural/remote practice as compared to those in metropolitan practice?

#### Review question 3:

What are the characteristics of programs that successfully prepare\* and support graduate health professionals, including allied health practitioners, new to rural/remote practice? (\*Prepare should include orientation and induction or similar programs)

### Outcome from this review

The Services for Australian Rural and Remote Allied Health (SARRAH) Inc. seeks to develop a web-based resource to support allied health professionals as they enter remote and rural practice. The online resource will include knowledge, skills and capabilities required for remote and rural practice; support and professional development guidelines; a directory of existing support resources; and self-directed learning modules. The results of this systematic review, which will identify orientation, support and skill requirements for rural health professionals, will guide the



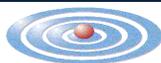
**Advisory Group**

development of this resource.

As part of quality assurance in the review process, CAHE review team consulted with the representatives of SARRAH.

**Methodology for the review**

A detailed description of the methodology underpinning this review has been provided in Appendix two.



## Results

### *Question 1: How does allied health practice differ between metropolitan, remote and rural?*

Health practice in each metropolitan, remote and rural Australian location differs greatly. However, a number of features distinguish remote and rural practice, and these features become more prominent with degree of distance from major centres (Liaw 2008). Additional features characterise remote practice, and each remote community has a high degree of uniqueness (Kelly and Dade Smith 2007, chapter 5).

Allied health practitioners form part of the remote and rural health workforce. Allied health practice is frequently defined by what it is not, for example “all other university trained health professionals except doctors and nurses who provide clinical, investigative, diagnostic or resource services and direct patient care to the community”(Fitzgerald, Hornsby and Hudson 2000). The evidence in this report arises from studies which include professionals from physiotherapy, occupational therapy, speech pathology, audiology, psychology, nutrition and dietetics, social work, orthotics/prosthetics, podiatry, pharmacy, optometry, radiography, dental technicians. Also included in one study (Hodgson 1991) were recreation officers, medical records administrators and medical librarians, and in another, information from non-health tertiary trained professionals including solicitors, teachers and engineers (Miles 2004).

#### Key general characteristics that distinguish remote and rural health practice from metropolitan are:

##### ❖ Burden of disease

Compared to metropolitan health practice, rural practice encounters a higher burden of disease poorer population health, and more suicide and trauma (Liaw 2008, Gregory 2009). A higher proportion of Indigenous people live in remote and rural areas, with concomitant poorer health status across their lifespan (Liaw 2008, Bent 1999).

Remote and rural populations have lower socio-economic status and educational levels (Gregory 2009) lower household incomes and higher cost of living than those in metropolitan areas (O’Kane 2003).

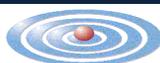
Population health issues are more to the forefront of remote and rural clinical practice (Liaw 2008, Dade Smith 2007, Devine 2006)

##### ❖ Access to health care

Fewer allied health professionals available in rural areas per head of population was a common finding (Smith 2008, Perkins 2007, O’Kane and Curry 2003, Sheppard 2001, Grimmer 1998). An allied health professional was likely to be the only professional of their discipline in the area, and /or the only allied health professional of any discipline in the area. This results in high workloads and long working hours (Perkins 2007, Devine 2006)

Models of care and service delivery in rural practice differed from those in metropolitan areas in order to help address access issues. Features of remote and rural service delivery included GP based hospitals, fly in/out specialist services, high consumer and community control of health care (Liaw 2008) In remote locations, a hub and spoke model was described, with a central team providing fly-in service of 2-4 days in each location. Training may be provided to enable local people to provide basic service (Miles 2004).

##### ❖ Confidentiality



## *Rural and Remote Practice*

Although only mentioned in one general reference (Liaw 2008), because rural health professionals live and practice in small communities with overlapping roles, extra care must be taken with privacy and confidentiality in personal and professional spheres.

### ❖ Cultural security

Working effectively with Aboriginal people was highlighted as an essential characteristic of remote and rural health practice (Gregory 2009, Dade Smith 2007, Sheppard 2001, Bent 1999, Hodgson 1991).

A culturally secure health practice is one in which “..a clinically and culturally competent workforce provides culturally appropriate health services, which are culturally safe to patients and providers.” (Liaw 2008 p221). Cultural security is built on the foundations of cultural awareness and cultural safety, and provides a framework from which to work effectively with different Aboriginal and Torres Strait Islander individuals, organisations and communities.

Cultural security is also an important aspect of working with migrant and refugee populations in remote and rural Australia (Liaw 2008). A high awareness of cultural issues was also described as a feature of rural practice in the United States (Bushy 2000, Kohler 1993)

### ❖ Team practice

Working with other health professionals takes different forms in remote and rural practice including:

- Multidisciplinary/ Inter-professional practice: working as part of a team with health professionals of other disciplines
- Transdisciplinary practice: building competencies where required to offer services that may not have been part of original discipline training (Aged and Disability Program Manual 2008). Extending the scope of disciplinary practice to meet community need can be a positive practice, but not in the absence of suitable training and competency building (Shepherd 2001, Sheppard 2001)

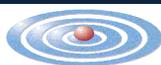
### ❖ Workforce characteristics (Fitzgerald, Hornsby and Hudson 2000)

The following features of the allied health workforce in remote and rural Australia were described:

- more new graduates, particularly in remote locations (Arthur 2005, Hodgson 1991, Stagnetti 2008 although not the case in Smith 2008)
- managed by non-allied health staff (Bent 1999)
- lack of supervision and mentors especially within own discipline (Devine 2006, Miles 2004)
- high attrition rate (Boshoff 2008)

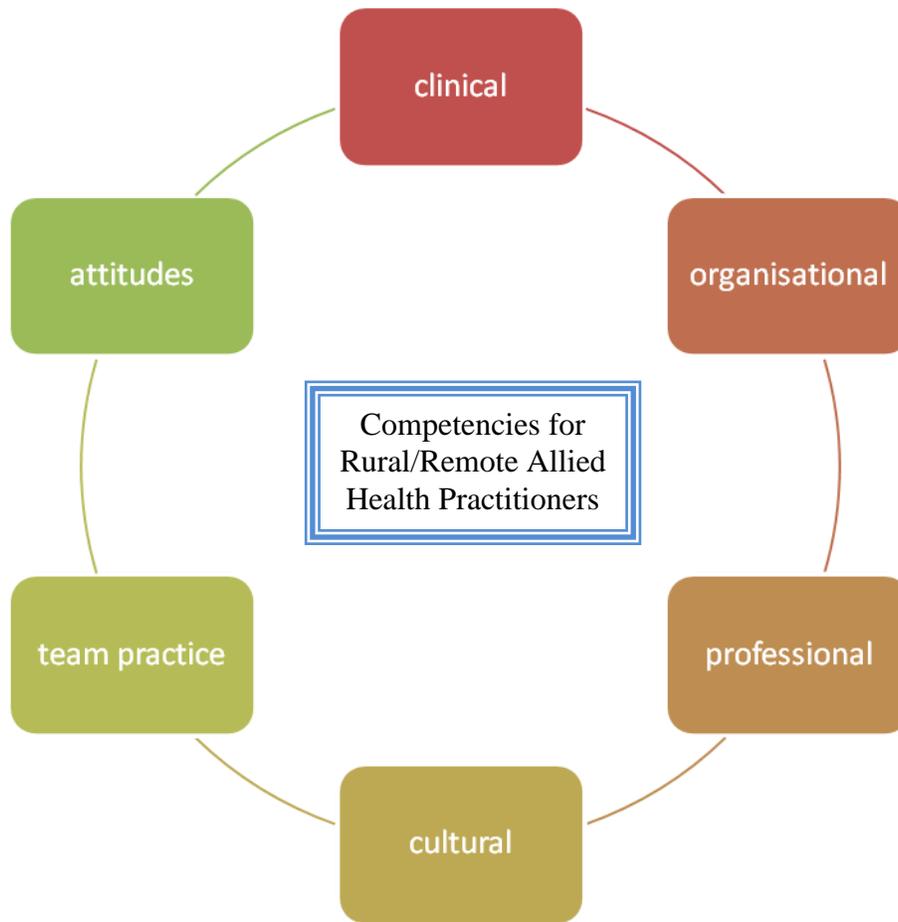
### ❖ Additional features of remote health practice include:

- geographical, professional and, often, social isolation of practitioners;
- inter-professional approach
- practitioners requiring public health, emergency and extended clinical skills.
- cross-cultural context;
- serving small, dispersed and often highly mobile populations;
- serving populations with relatively high health needs;
- a physical environment of climatic extremes;
- communications environment of rapid technological change.



**Question 2: What additional skills and competencies are required of Allied Health Professionals working in rural/remote practice as compared to those in metropolitan practice?**

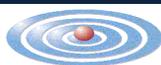
Additional skills and competencies are required of allied health professionals in remote and rural health practice to address these areas of difference compared with metropolitan practice. These include extra competencies in clinical, organisational, professional, cultural, team practice and attitudinal areas.



The need for these skills and competencies generally increases on a sliding scale with increasing remoteness. In addition, specific skills and competencies are required for remote practice (indicated by ✓✓)

**Clinical competencies**

	Rural	Remote	Reference
Wide range of clinical skills required in own discipline ie. a generalist specialist	✓	✓	Arthur 2005, Bent 1999, Boshoff 2008, Perkins 2007, Peterson 2003, Dade Smith 2007
Advanced practice skills specific to remote and rural	✓	✓✓	Arthur 2005, Boshoff 2008



## Rural and Remote Practice

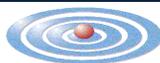
practice including: triage, diagnosis			
Competencies in clinical skills of other disciplines (multiskilling) if required due to workforce shortage/community need	✓	✓	Arthur 2005, Boshoff 2008, Sheppard 2001, Shepherd 2001, Stagnetti 2008
Health promotion, public health and primary health care skills	✓	✓✓	Devine 2006, Liaw 2008

### Organisational competencies

	Rural	Remote	Reference
Capacity to work in advisory role and facilitate remote communities support to implement and monitor programs	✓	✓✓	Bent 1999
Good communication/teaching skills in order that clients and support staff understand therapy objectives and programs	✓	✓	Bent 1999, Kohler 1993
Workload prioritisation	✓	✓	Bent 1999, Lannin 2003
Business skills to assist general management and organisation	✓	✓	Devine 2006, Mills 2002

### Other professional competencies

	Rural	Remote	Reference
Skills in analysis, planning, submission, preparation, implementation and evaluation of service delivery and developments especially if working as sole practitioner	✓	✓	Bent 1999, WA Country Health Service 2008
Knowledge and skills in implementation of alternative service models Eg volunteer schemes, training of multipurpose health personnel, 'parents as therapists' schemes	✓	✓	Boshoff 2008 Hodgson 1991
Self care skills (including stress management)	✓	✓✓	Devine 2006, Wills 1995, Dade Smith 2007
Advocacy for role of own profession within the multidisciplinary team/community	✓		Devine 2006
Networking to access supervision and mentoring, professional development, support	✓	✓✓	Devine 2006, Miles 2004, Hodgson 1991
Quality and safety management skills Legal and ethical practice knowledge and skills Financial and resource management skills	✓	✓	WA Country Health Service 2008
Undertake local research	✓	✓	Dade Smith 2007



### Cultural competencies

	rural	remote	reference
Develop and practice culturally secure health practice with Aboriginal individuals and communities	✓	✓✓	Bent 1999, Liaw 2008, SARRAH 2008, WA Country health service 2008
Specific knowledge and skills required for each unique remote community: different language, cultural norms and practices, health status, practical issues, water supply, weather conditions		✓✓	Kelly and Dade Smith 2007
Awareness of community structure	✓	✓	Kohler 1993, Bushy 2000
Understanding rural ways of thinking and doing	✓	✓	Dade Smith 2007

### Team practice competencies

	Rural	Remote	Reference
Excellent multidisciplinary team member: show leadership and work collaboratively	✓	✓	Heaney 2004, Will 1995, Dade Smith 2007, Liaw 2008
Specific competencies required for transdisciplinary practice	✓	✓	Aged and disability program 2008, Wills 1995
Interprofessional practice: Ability to work with whoever is available, whenever they are available Working as part of a team, showing leadership as well as collaboration, cooperation, commitment, assertiveness, responsibility, communication, autonomy, coordination, governance	✓	✓	WA Country Health Service 2008, Liaw 2008

### Attitudinal competencies

	Rural	Remote	Reference
Cooperative and collaborative Embracing new technologies Enjoy challenges Initiative Flexible	✓	✓	Bent 1999, Boshoff 2008, Stagnetti 2005
Autonomous Capacity to work unsupervised	✓	✓✓	Bent 1999, Boshoff 2008 Shepherd 2001, Heaney 2004 Stagnetti 2005
Resourcefulness, problem solving, creativity	✓	✓	Devine 2006, Mills 2002, Dade Smith 2007 Kohler 1993
Thoughtful, reflective and critical of their own practice	✓	✓	Liaw 2008

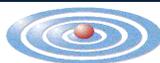


**Question 3: What are the characteristics of programs that successfully prepare\* and support graduate health professionals, including allied health practitioners, new to rural/remote practice? (\*Prepare should include orientation and induction or similar programs)**

Numerous programs that will prepare and support health professionals new to remote and rural practice have been described in the literature. These support programs aim to address the challenges faced by rural practitioners, such as those relating to professional development, career, family, organisational system and structure and community support. Table 1 below summarises these issues into three broad categories: professional, personal and organisational or administrative factors.

*Table 1: Summary of challenges faced by remote and rural practitioners as identified in the literature*

<u>Professional</u>	<u>Personal</u>	<u>Organisational/ Administrative</u>
<ul style="list-style-type: none"> <li>• Too long working hours; staff shortage leading to high work load; shortage of locum</li> <li>• Diversity of clients; wide range of services required</li> <li>• Professional isolation; lack of specialist support</li> <li>• Lack of mentoring or inadequate supervision</li> <li>• Lack of access to professional development/continuing education (costs associated with it, distance required to travel to the courses, lack of financial support to attend, lack of information about availability and timing of courses, difficulty in obtaining locum, lack of relevant courses)</li> <li>• Lack of opportunity for career development</li> <li>• Lack of communication system; lack of access to technology</li> <li>• Inadequate or absence of orientation</li> <li>• Lower income</li> <li>• Inadequate preparation</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of social and cultural facilities; inadequate educational facilities for the children</li> <li>• Non-competitive salaries</li> <li>• Cost of travel</li> <li>• Distance from families and friends/lack of entertainment and social support</li> <li>• Burnout</li> <li>• Cultural issues</li> <li>• Lack of rural incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of management support ; lack of their understanding of AH services, skills, knowledge and roles</li> <li>• Inadequate resources and inappropriate infrastructure</li> <li>• Poor communication between the community and the allied health team</li> <li>• Lack of consistency in the organisational structure for allied health across rural health services/poor management structure</li> </ul>



## Rural and Remote Practice

for remote area work <ul style="list-style-type: none"> <li>Rural health workers under-represented in the professional organisations</li> </ul>		
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In relation to the identified challenges of rural practitioners, support programs will be discussed using the same categories as above. Table 2 shows the summary of different programs that prepare and support health practitioners new to remote and rural practice.

### Professional Support

#### A. Orientation

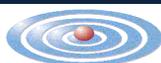
For allied health practitioners commencing work, orientation to the rural/remote community and health care facility is extremely important and should foremost include awareness of culturally acceptable practices and patient expectations. A good understanding of the population, cultural values and beliefs and awareness of population health characteristics are considered to be key components of the orientation program. Communication is another issue to consider, particularly the use of idioms, nuances and vernacular terms and the more common or ordinary terms used by patients and families. Language can be a source of distress and can have a negative impact not just in the practice but also workplace relationships, particularly in rural areas where there are different dialects. (Curran 2008)

Orientation to the community and the range of services and amenities available should also be part of the orientation process. Information regarding availability and access to the following should be provided: sports and recreation, library and facilities, clubs and groups, restaurants, weekend activities, local night spots, schools, child care, shops, banks, post office, travel options, local events, local sights, health services. Facilitating socio-cultural connection within the community is integral to fostering integration into community and place. Orientation should also include briefing regarding access to information resources, such as equipment loan libraries, resource registers, web-resources, inter-health service loans.

Tour of the health care facility is important, as this can help provide an overview of the regional health authority, organisation and delivery of services. Review of organisational and structural model should also be part of the orientation program, as well as the policies and procedures of the department. Providing checklist for self-directed orientation or a list of resource people in the department should be done upon arrival in the area.

Morgan (1996) described the core components of an orientation program for general practitioners in the Northern territory and these included:

- Community language
- Cross cultural awareness and cultural safety training by an Aboriginal cultural educator
- Specific local Aboriginal community cultural issues
- Liaison with Aboriginal health workers including mental health



- Site visit
- Organisational issues

It was reported in this paper that this model is applicable to other disciplines.

Generally, orientation programs should be needs-based, comprehensive, multi-faceted and sustained. Addressing the professional and personal needs of the allied health practitioner and their family members are essential in supporting the transition of allied health practitioners to rural practice, thereby enhancing their successful integration within the community. In some instances, it may be necessary to individualise some aspects of the orientation. It is important that an adequate period for transition be provided, until clinicians feel more confident with the practice.

### B. Professional Development

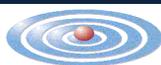
One of the identified issues challenging allied health practice in the remote and rural areas is professional isolation. This lack of support from other professional groups in addition to the huge case load and the variability of cases which extend beyond the scope of one's discipline clearly suggest the need for continuing education. Opportunities for continuing professional education that will broaden the skills of health practitioners could help address these issues. Accessible and appropriate professional development covering both discipline-specific skills and contextual service skills are required to ensure safe and effective delivery of clinical and professional services in the remote and rural area. The following are suggested contents of professional development programs:

- Clinical/Profession-specific training
- Management Training
- Special Interest – Aboriginal and Torres Strait Island Health and Community-based programs

Contextual service skills will enable clinicians to be optimally effective in the remote and rural practice, as opposed to a metropolitan setting. Development of business skills to assist in general management and organisation should also be part of education programs. Professional development services and programs must therefore consider this broad range of needs. In addition, practitioners should be encouraged to create and nurture links with the community members and community co-workers who can provide ongoing education and cultural mentoring opportunities.

Post graduate training in rural health practice is just one of the many options for continuing professional education. The Centre for Remote Health (Flinders University and Charles Darwin University) offers post-graduate distance education in remote and rural health with specific allied health content. The Graduate Certificate in Health (Remote Health Practice – Allied Health) includes personal organisation (time, case-load and information management), models of service delivery for Indigenous and other remote and rural communities and opportunities for advanced clinical skills development through a clinical placement. The development of multidisciplinary courses that would lead to post-graduate qualification in rural practice, which any suitable qualified allied health practitioner could enter, should be underway. Negotiated study-leave for post graduate training such as this could address this problem of professional development.

Provision of books, journals, and internet access may aid in self-directed learning. Periodic meetings with colleagues for both professional and social refreshment could involve organising journal clubs or



conferences in rural areas, or 'on the job' updates. Mentoring from a same-discipline professional or the team leader would be a valuable source of training. Paid conference leave and travel can encourage practitioners to attend conferences organized outside their communities.

The flexible delivery of education and support will provide a means by which the needs of practitioners are met in a timely manner. Rural health practitioners were concerned that continuing education sessions can be difficult to attend, because of the distance and lack of relieving staff. One of the ways by which this could be addressed is through the use of information and communication technologies. These techniques have been used in a variety of ways to support the delivery of educational and clinical support to health and medical professionals (Walker 1998). Teleconferencing and online education are possible options for providing access to continuing education. Videoconferencing has also been shown to provide a useful tool for improving exchange of information for both clinical and educational purposes in the remote Australia (Sen Gupta et al 1998). A minimum standard of an email account and Internet access should be provided to all rural allied health professionals.

Establishing rural health training units can support professionals and maintain the standards in remote and rural area health practice.

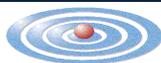
Overall, improving access to continuing professional education can address the problem of professional isolation commonly experienced in remote and rural practice, which in turn, may improve retention of rural practitioners.

### C. Networking/Clinical Support

Remote and rural practitioners are often left alone in the analysis, planning, submission, preparation, implementation and evaluation of developments in allied health services. It is therefore important to establish networks with other professional groups to facilitate effective and safe allied health service delivery within their area. Hodgson & Berry (1991) and Bent (1999) found that inter-professional cooperation and wider networking were integral to survival for allied health professionals in remote and rural service delivery. Networking within and outside of the profession in the local, regional or metro-based practitioners could address the issues of professional isolation, which in turn, could lead to efficient and better delivery of health services.

Hotlines may be established to enable clinicians to have quick access to consultation, assessment, treatment planning, and treatment technique information. A continually updated directory of therapists in the combined geographical area and their expertise areas can aid practitioners in developing their own resource network. Providing facilities for phone or email contact with seniors or specialist colleagues can be useful for seeking professional advice. The importance and value of being able to contact metropolitan counterparts for advice and support are also emphasized in the literature. Often contacts are made through telephone out of necessity, but there is preference for face-to-face contact whenever possible.

Rural health practitioners are encouraged to be involved with their professional organisations and related interest groups which can provide initiatives conducive to professional networking and career enhancement. Professional associations also have a role in the facilitation of a supportive working environment for allied health practitioners new to rural practice, especially where accreditation process exist that involve gathering continuing professional education and development points.



Informal networking with peers appeared to be important in one of the surveys conducted among general practitioners in rural/remote Australia. There were a range of occasions when they were able to interact informally with colleagues such as during group practice meetings, meetings or dinners with visiting representatives from pharmaceutical companies, meetings or dinners with visiting medical specialists, meetings of medical advisory board or regional medical officials. Attendance or presenting at non-local meetings and conferences was another important occasion for informal contact with peers, which is being valued well by practitioners.

### D. Recognition/Career Advancement

There is a common misconception that rural health practitioners are inferior to their metropolitan counterparts. Opportunities to provide forums for their skills to be demonstrated and shared with new graduates/metropolitan clinicians can counter this undervaluing of rural practice. Work needs to be done to boost the morale of remote and rural practitioners. The media could be used to raise the awareness of allied health or medical practitioners and recognise their service to the society. Improving the awareness of the community and a better understanding of the services being provided can contribute to professional satisfaction. Developing clear career pathways with acknowledgement of specialisation (including 'rural generalist') could also raise the status of rural clinicians.

### **Financial Support**

Salary packages for remote and rural allied health practitioners need to reflect and offset the increased cost of living and the challenges of living in the area, including reduced access to goods and services. Practitioners should receive adequate and fair wages, rental allowance or housing packages, study allowance or leave, annual leave and a mentoring allowance. The ability to salary sacrifice may also be an additional incentive.

### **Personal and Social Support**

Whilst professional issues are significant to allied health and medical practitioners, personal and social issues sometimes exert a dominant influence on their level of satisfaction. Family networking is an effective means of reducing the isolation felt by the practitioners and their families. Newsletters or pamphlets providing information about the available support services, such as emergency hot lines, retreats or religious support structures, social/recreational centres, etc. can help reduce the anxiety of recently relocated practitioners. Opportunities for spouse employment, education packages and child care support for a specified amount could also be part of the incentives.

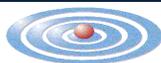
### **Organisational Support**

Employer/organisation-support incentives and initiatives, including staff coverage and locum support, remuneration for time off and paid travel expenses for continuing education are considered best practice approaches for retaining allied health or medical professionals in their practice. Local management issues such as 'industrial relations', the management strategy and structure, and 'promotion chances' are factors that affect job satisfaction. Hence, monitoring through staff surveys should also be considered. There is also concern for feedback about performance and system of accountability which could be offered by structured supervision.



Table 2: Summary of programs that prepare and support health professionals new to remote and rural practice

<u>Professional</u>	<u>Personal</u>	<u>Organisational/ Administrative</u>
<ul style="list-style-type: none"> <li>• Orientation for practitioners new to rural practice should include: specific rural health concerns; cultural awareness; access to information resources; clinical management</li> <li>• Provision of continuing education/professional development (up skilling)with more flexible delivery– locally accessible post-graduate remote area studies; discipline-specific and non-clinical contextual service delivery areas; inter-professional continuing professional education</li> <li>• Provision of books, journals, email/internet access, opportunities for distance learning; technology-based delivery methods or tele-education; webcasting technology</li> <li>• Provision of at least an e-mail account and Internet access for all rural allied health professionals</li> <li>• Organising conferences in the rural area</li> <li>• Graduate certificate in Health (Remote Health Practice)</li> <li>• Promotion of rural practice/regional development</li> <li>• Provision of financial incentives; greater funding; relocation grants; salary packages</li> <li>• Support from other health professionals – wider networking to minimise professional isolation</li> <li>• Induction programs for newly recruited practitioners; orientation (which includes orientation to the health system; culturally-acceptable practices and patient expectations, vernacular terms and nuances, health characteristics, orientation to the community, available support for families); facilitating socio-cultural connection with the community</li> <li>• Career promotion – establishing clear ladder; transparent promotion criteria; creation of senior positions</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of good quality social and cultural facilities and educational facilities</li> <li>• Assistance to spouse/partner in finding employment</li> <li>• Child care support for families</li> <li>• Provision of facilities for communication – phone and email contact</li> <li>• Family networking or support networks for “new arrivals” to facilitate transition to rural areas</li> <li>• Setting up a “crisis line”</li> <li>• Flexible working hours</li> <li>• Orientation and induction to the workplace should include: sports and recreation; library facilities; restaurants; weekend activities; local sights, health services</li> </ul>	<ul style="list-style-type: none"> <li>• Should have a better understanding of the allied health services</li> </ul>



## Rural and Remote Practice

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| <ul style="list-style-type: none"> <li>• Recognition</li> <li>• Provision of relief or locum support</li> <li>• Creation of links with community members and community co-workers who can provide ongoing cultural mentoring</li> <li>• Opportunity for academic adjunct appointment</li> <li>• Collaboration of professional organisations with rural communities</li> <li>• Involvement of professional organisations in establishing mentor programs for rural allied health practitioners</li> <li>• Development of “best practice” guidelines for rural areas</li> <li>• Establishment of hotlines to enable AHP to have quick access to consultation, assessment, treatment planning and technique information</li> <li>• Continually updated directory of all professionals in the combined geographical area and their expertise areas</li> </ul> |  |  |
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### Specific Programs

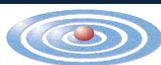
There were some specific support programs that were reported in the literature, with most of them already trialled and proven effective in specific populations. Below is a short description of each of the programs.

#### **Dr. DOC support program** (Gardiner 2006)

- This program involves formation of a peer-support network with experienced rural GPs; regular health check-ups for rural doctors and their families; pamphlets providing information about support services; emergency support line; rural retreats; development of network of GPs and other professionals.
- Results of the study evaluating its impact on the well-being and retention of GPs have shown that developing psychologically based programs to not only boost the physical and mental health of GPs, but also to reduce departure from rural areas.

#### **State-wide Allied Health Education Program (SWAHEP)** (O’Toole & Schoo 2008)

- Aims of the program were to: provide needs-based continuing education to remote and rural allied health professionals; facilitate allied health networks and inter-professional



## Rural and Remote Practice

practice; create an opportunity for professionals to re-enter the workforce; improve self-management team skills and leadership; enhance career options in rural Victoria

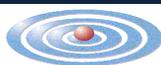
- Information technology in the form of webcasting was used in the program.
- This education program creates new social spaces for allied health professionals, as a way to increase professional development and networking via a multi-platform mode, which includes face to face, video link and asynchronous online workshops.

### **Clinical Experience Program** (Parkin et al 2001)

- Rural AH practitioner spends 1-2 weeks in a major tertiary metropolitan hospital gaining experience in the clinical area of their choice; in-service was schedules at which the visiting AHP would give a presentation to the metro AHPs; a clinical consultant develops resource manuals/information packages on each clinical area covered for use by rural/remote AHP during their visit. The aim of such a program is to mutually educate metro and rural practitioners on respective health service delivery issues.
- Enhanced clinical skills, increased networking and access to resources were reported by rural/remote allied health practitioners as benefits of the program.

### **Support Service Delivery for Rural Nurses – Central Australian Nurse Management Model** (van Haaren & Williams 2000)

- Best Practice Framework for Remote Area Nursing Services – management tool used to explain the important linkages between nursing roles, resources, philosophy, goals, standards, and the context of practice; encourages development of relevant education and quality management programs to support the specialty of remote area nursing
- Pathways to professional primary health care practice for remote area nurses – work based professional development program that articulates with formal higher education courses. Pathway features included: (1): pre-employment package; (2) 6 weeks orientation upon commencement of duty; (3) community-based in-service education; (4) town-based workshops; and (5) skills maintenance opportunities. Nurses gain recognition of prior learning by completing modules within the Pathways Program to either gain qualifications in remote area nursing or in higher education degrees such as drug and alcohol studies, women’s health, adult education or a master of advanced nursing practice.
- Partnership in Practice Scheme refers to the establishment of a dedicated pool of trained nurses within the rural hospital to provide relief and support to nursing staff in remote areas on frequent bases.
- Implementation of these three key initiatives that comprise the CAN model has succeeded in attracting, stabilising and skilling a remote area nursing workforce.



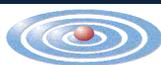
### **Transdisciplinary Model of Practice** (Department of Health and Community Services, Northern Territory Government 2008)

- This transdisciplinary approach has been adopted for remote communities as it allows services to be provided to a population that previously had limited access to these specialised services. It aims to build community capacity, and improve provision of specialised services for people living in remote communities and to meet some of the service delivery challenges.
- Each team member is allocated communities that they visit regularly and are responsible for the delivery of services to these communities; will also visit other communities to provide discipline specific services according to current referrals and requirements on particular communities
- The allied health professional plays a role in supporting and assisting these services to maintain the clients in the community. Where these services are not available the Team should be working to facilitate new services in collaboration and consultation with the appropriate community members.

### **Aboriginal Cultural Awareness Program(ACAP)** (Wakemen and Field 1998)

- ACAP is a comprehensive training program developed by the Northern Territory Department of Health and Community Services in recognition of the fact that a largely non-Aboriginal health workforce services a majority of Aboriginal clients. The ACAP model is based on extensive research and consultation with staff of the Department as well as all major Aboriginal organizations in the NT and other government departments. It is consistent with recommendations of the National Aboriginal Health Strategy and the Royal Commission into Aboriginal Deaths in Custody.

Synthesis of literature evidence indicates that in order for programs to be effective, strategies need to be coordinated effectively and offered as a package, rather than in a piece-meal fashion. Delivery of services/programs must be the result of local discussions involving the affected key parties and tailored to their needs. Greater participation by the local community with increased collaboration may improve support programs. Communities are the repositories of knowledge and experience relating to local health needs, expectations and use, and should therefore be involved in service and workforce planning from the outset. Community involvement leads to commitment and a sense of ownership, which in turn can lead to the appropriate use and support of the service.



### Summary of Evidence

The National Health and Medical Research Council (NHMRC) have developed an approach for assessing the body of research evidence across various dimensions based on which recommendations could be formulated. This broad framework provides opportunities for an inclusive approach, which recognises all forms of best available research evidence and not necessarily limit to evidence arising from one research paradigm (such as quantitative). The body of evidence matrix is underpinned by five key components. They are evidence base, consistency, clinical impact, generalisability and applicability. Utilising this innovative and inclusive approach, CAHE has summarised the overall results of this review using these five components. For the purpose of this review, each component is defined as:

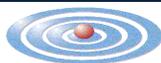
- **Evidence base** –assessed in terms of the quantity and the level of evidence of included studies
- **Consistency** –assessed in terms of whether the findings are consistent across all included studies
- **Clinical Impact** –assessed in terms of relevance of evidence to stakeholders, costs vs. benefits, duration
- **Generalisability** – assessed in terms of whether participants and settings of included studies match those of the target population
- **Applicability** – assessed in terms of whether the evidence base, derived from included studies is relevant to the Australian and local settings

Component	Strength of Evidence
<b>Evidence base</b>	A total of 70 publications were reviewed and included as evidence based. Majority of included studies were surveys and qualitative studies highlighting these to be the most appropriate research designs in answering the review questions. Inclusion of this diverse range of publications ensured access to rich, first hand research evidence on stakeholders’ perspectives on supporting transition of allied health professionals to remote and rural settings.
<b>Consistency</b>	While there was diversity in the evidence base, findings from these sources were remarkably similar. These common themes, as identified from included studies, reflect emerging consistency in research evidence.
<b>Clinical impact</b>	Literature evidence identified additional competencies required by allied health practitioners working in remote and rural areas. The impact of this finding means practitioners need be equipped with knowledge, skills and attitude specific to remote and rural practice in order to cover the wider scope and advanced level of practice in the remote and rural areas. Literature also provides evidence of numerous programs that will prepare and support health professionals new to remote and rural practice. These programs can have an impact and implementation of these programs may contribute to the retention of health care practitioners in the remote and rural areas and therefore address the issue of staff shortage and increased work load.
<b>Generalisability</b>	The participants and settings indicated in the included studies match the identified population for this review – allied health practitioners in the remote and rural areas. Whilst there were some studies on doctors and nurses, majority of the included publications were allied health practitioners, highlighting good generalisability.
<b>Applicability</b>	Majority of studies (90%) included in this review were conducted in Australia, with individual Australian states and territories well represented. Evidence derived from these studies provides unique perspective of common and local issues. Therefore, the results of this review are highly applicable and relevant in the Australian allied health care context.



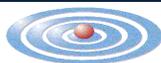
## Limitations

As with any systematic review of the literature, there exists the possibility that some publications could have been missed merely due to search parameters, time and resource constraints. All attempts were made to ensure rigour in the searching process, however a systematic review is only the best effort at a point in time and it is possible more evidence may be identified in the future. Additionally, due to time and resource constraint, some publications had to be excluded. These publications may have provided additional relevant information. The advisory group was contacted as part of the validation of the search and literature retrieval process. Due to the transparent and rigorous nature of the review process, and the inclusion of numerous iterative steps in validating key processes involved in this review, it is postulated that the impact of any missing publications has been minimised.



## Core Learning

<b>Core learning</b>	<p>A set of <b>five core constructs</b> are contained in this report. These concepts will provide a framework that will guide the development of a web-based resource aimed to support allied health professionals as they enter remote and rural practice. The competencies required of an allied health professional and the programs that will successfully prepare and support practitioners new to rural practice are described.</p>
<b>Core learning 1</b>	<p>There are general characteristics that distinguish remote and rural health practice from the metropolitan, and these can be categorized into: burden of disease, access to health care, confidentiality, cultural sensitivity, team practice, workforce characteristics. Additional features of remote health practice include: geographical, professional and often social isolation of practitioners; inter-professional approach; practitioners requiring public health, emergency and extended clinical skills; cross cultural context; serving small, dispersed and often highly mobile populations; serving populations with relatively high health needs; a physical environment of climatic extremes; communications environment of rapid technological change.</p>
<b>Core learning 2</b>	<p>Additional competencies are required of allied health professionals in remote and rural practice and these included extra competencies in clinical, organizational, professional, cultural, team practice, and attitudinal areas.</p> <p><i>Clinical competencies:</i> wide range of clinical skills; advanced practice skills such as triage and diagnosis; multi-skilling; health promotion, public health and primary health care skills</p> <p><i>Organisational competencies:</i> capacity to work in advisory role; good communication and teaching skills; work load prioritization; business skills</p> <p><i>Other professional competencies:</i> skills in analysis, planning, submission, preparation, implementation and evaluation of service delivery and development; implementation of alternative service models (volunteer schemes, training of multi-purpose health personnel); self-care skills (Stress management); advocacy for role of own profession within the multi-disciplinary team or community; networking; quality and safe management skills; undertake local research</p> <p><i>Cultural competencies:</i> culturally secure health practice with Aboriginals; specific skills for unique remote community (different language, cultural norms &amp; practices, practical issues); awareness of community structure; understanding of rural ways of thinking and doing</p> <p><i>Team practice competencies:</i> ability to work collaboratively and leadership skills; skills for trans-disciplinary practice; inter-professional practice</p> <p><i>Attitudinal competencies:</i> cooperative and collaborative; autonomous; resourcefulness, creativity, reflective and critical of own practice</p>



**Core learning 3**

There is substantial evidence from the literature regarding the challenges faced by rural practitioners, which can be grouped into professional, personal and organizational or administrative issues.

*Professional:* High work load; diversity of clients; professional isolation; lack of access to professional development; lack of opportunity for career development; lack of communication system or access to technology; inadequate or absence of orientation; underrepresentation in professional organizations

*Personal:* Lack of socio-cultural facilities; lack of support for family; non-competitive salary; cultural issues; lack of rural incentives

*Organisational or Administrative:* lack of management support; inadequate resource and inappropriate infrastructure; lack of consistency in the organizational structure

**Core learning 4**

Competencies of health practitioners should be complemented by support programs in order to minimise the challenges associated with health service delivery in the remote and rural areas. These programs include professional, financial, personal or social, and organisational or administrative support.

*Professional support:* adequate orientation that will facilitate transition to rural practice and integration within the community; opportunities for professional development and networking; development of clear career pathways.

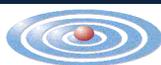
*Financial support* in the form of salary packages, housing allowance, annual leave or additional incentives such as salary sacrifice

*Personal/social support:* education packages or child care support; support services, such as emergency hot lines, retreats or religious support structures, social/recreational centres; opportunities for spouse employment

*Organisational/administrative support:* Employer/organisation-support incentives and initiatives, including staff coverage and locum support, remuneration for time off and paid travel expenses for continuing education; monitoring through staff survey; structured supervision

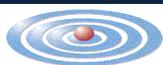
**Core learning 5**

Synthesis of literature evidence indicates that in order for support programs to be effective, strategies need to be coordinated effectively and offered as a package, rather than in a piece-meal fashion. Delivery of services/programs must be the result of local discussions involving the affected key parties and tailored to their needs. Greater participation by the local community with increased collaboration from all the stakeholders, including the government, may improve support programs.

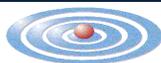


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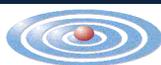
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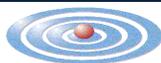
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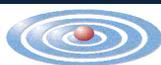
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## *Rural and Remote Practice*

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## Appendices

### Appendix One: Data Extraction Forms

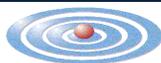
**Question 1: How does allied health practice differ between metropolitan, rural and remote settings?**

**Question 2: What additional skills and competencies are required of Allied Health Professionals working in rural/remote practice as compared to those in metropolitan practice?**

Author:		Year :	
Type of Publication:			
Setting:			
Discipline			
Competencies	<b>Metro</b>	<b>Rural</b>	<b>Remote</b>
1. Knowledge			
2. Skills			
3. Attitude			
Others			
<ul style="list-style-type: none"> <li>• Referral mechanism</li> <li>• Service delivery</li> <li>• Patient characteristics</li> <li>• Condition/cases</li> <li>• Others</li> </ul>			

**Question 3: What are the characteristics of programs that successfully prepare\* and support graduate health professionals, including allied health practitioners, new to rural/remote practice? (\*Prepare should include orientation and induction or similar programs)**

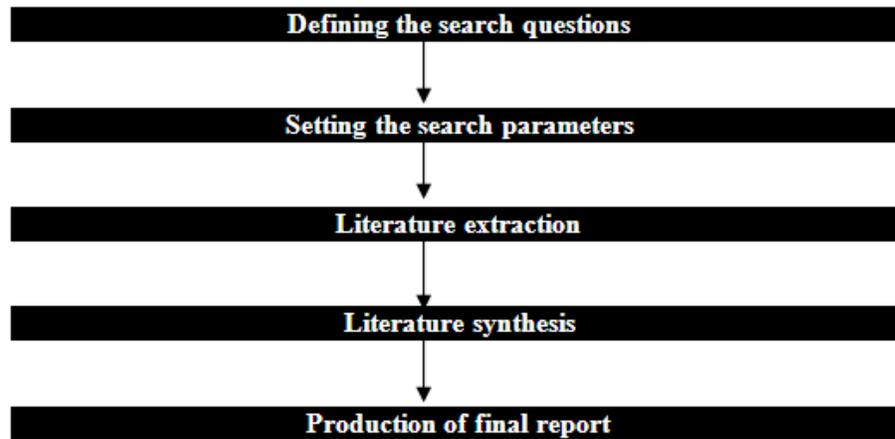
Author:		Year:	
Type of Publication:			
Setting:			
Discipline:			
Support programs (include characteristics)/Facilitators for Retention			
<ul style="list-style-type: none"> <li>•</li> </ul>			
Issues challenging AHP in rural/remote practice/Barriers			
<ul style="list-style-type: none"> <li>•</li> </ul>			



**Appendix Two: Methodology**

**Methodology**

The systematic review was undertaken using an iterative, step-by-step approach to ensure transparency and rigor in the review process. Additionally such a process provided the opportunity for project stakeholders to guide the direction of the project and provide valuable insights from their perspective and ultimately ownership of the outcome. The systematic review was undertaken in five discrete, conjoined stages.



**Criteria for considering publications in this review**

In agreement with the stakeholders of this review, specific criteria for publications relevant to this review were considered and identified

- **Types of studies**

Any quantitative or qualitative publication that reports on the differences between metropolitan and rural or remote allied health practice, including additional competencies was included in this review. Publications that describe orientation or support programs for nurses, medical and allied health practitioners have been considered. Only articles written in the English language and published in the last 10 years were included.

- **Types of participants**

Publications describing the competencies, actual practice and support programs for remote and rural allied health professionals (health professionals for question three) were included in the review.

- **Types of exposure**

All publications that reported remote and rural practice, programs, orientation, and support were considered. Studies comparing metropolitan with remote and rural practice were also reviewed.

- **Types of outcomes**

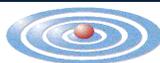
A range of outcomes were considered, including practitioner competencies, level of satisfaction, retention, quality of life, and the level of support obtained.

- **Timeline**

Greater than 6 months

**Search strategy for**

The studies identified for review inclusion were assessed by CAHE researchers and the



**identification of studies/publications**

advisory group to reduce errors/bias in accessing peer reviewed published evidence. Relevant databases were searched to evaluate the amount of research undertaken in this area. Restriction was placed on the publications reported in English language only.

**Peer reviewed databases**

- Amed
- Australian Education Index
- Current contents connect
- Embase
- PubMed
- PsychInfo
- Medline
- CINAHL
- Scopus

**Key words**

The following search strategy was applied in the same manner to all the aforementioned databases. All publications were retrieved from a combination of keyword 1 and keyword 2.

<i>Keyword 1</i>	<i>Keyword 2</i>
<ul style="list-style-type: none"> <li>• Allied Health</li> <li>• Physiotherap*</li> <li>• Physical Therap*</li> <li>• Occupational Therap*</li> <li>• Speech Therap* or speech pathology*</li> <li>• Dietit* OR nutrition*</li> <li>• Social work*</li> <li>• Podiatr*</li> <li>• Radiograph* /medical radiation/ diagnostic imaging/ nuclear medicine</li> <li>• Audiology</li> <li>• Prosthetic* OR orthotic*</li> <li>• Pharmacy</li> <li>• Psychology</li> </ul>	<ul style="list-style-type: none"> <li>• Rural</li> <li>• Remote</li> <li>• Metropolitan</li> <li>• Country</li> </ul>

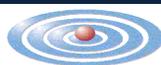
The titles and abstracts identified by the above search strategy were assessed for eligibility by the CAHE researchers and the advisory group. Full text copies of the different studies considered to be potentially relevant for the review were retrieved.

**Pearling**

The reference lists for each study which met the inclusion criteria were also scanned to identify any further studies not retrieved through the initial search.

**Literature Extraction**

Data extraction was conducted by the CAHE reviewer using two data extraction tools (Appendix One). For publications which addressed question one and two of the review, the following data were extracted:

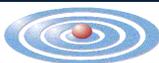


## *Rural and Remote Practice*

- Author/s
- Type of study
- Setting
- Discipline
- Competencies for metropolitan, remote and rural (categorised into knowledge, skills and attitude)
- Differences in practice

For publications which addressed question three of the review, the following data were extracted:

- Author/s
- Type of study
- Setting
- Discipline
- Support programs/Facilitators for Retention
- Issues challenging rural practice/Barriers



Appendix Three: Figures

Research paradigm of retrieved publications

Figure 1 highlights the different study designs included in this review. Of the 70 publications, the majority were surveys and qualitative studies. As this review aims to synthesize emerging patterns regarding remote and rural allied health practice, data collection through surveys and qualitative methods are preferred sources of information.

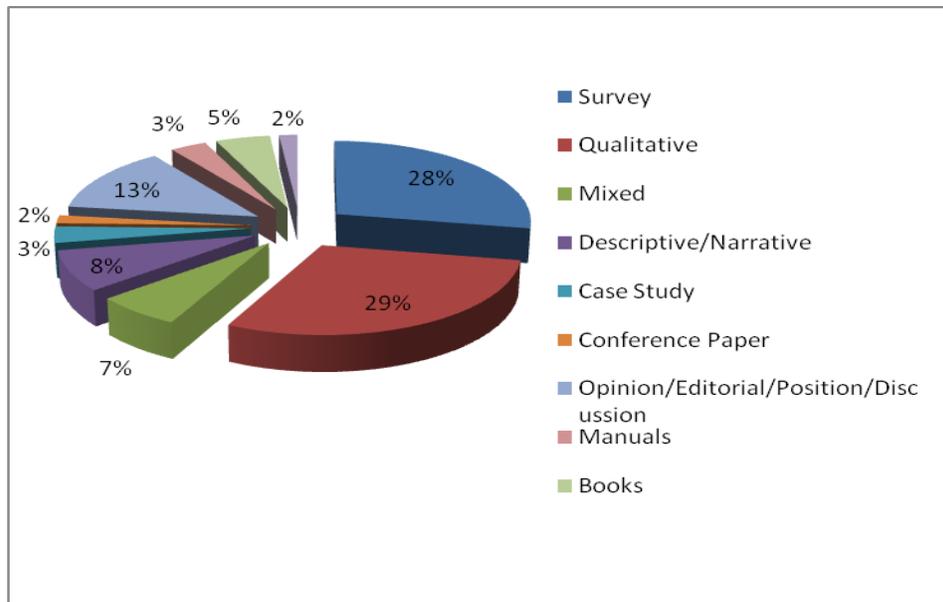


Figure 1: Distribution of publications as to study design

Geographical Distribution of Retrieved Publications

Many of the issues and discussion points in this review were based on studies conducted in Australia, as shown in Figure 2. Hence, applicability of results in the Australian context is very promising.

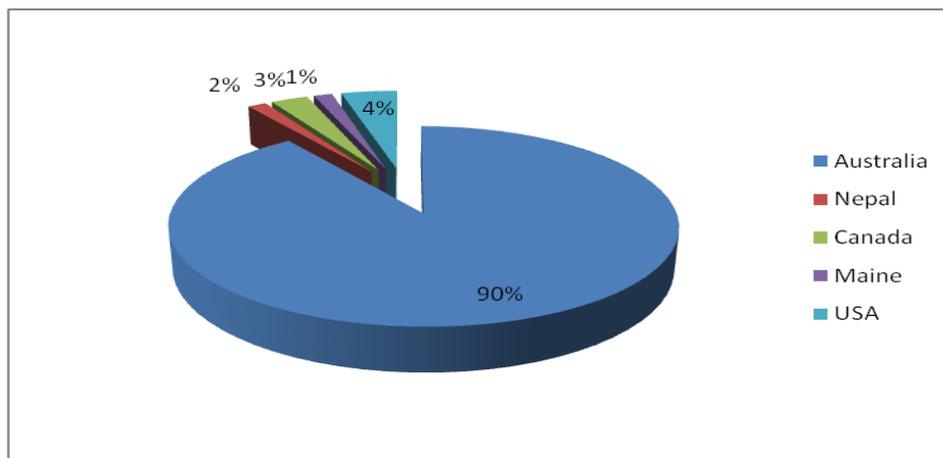
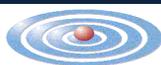


Figure 2: Geographical distribution of the included publications



**Health Disciplines**

A wide range of health allied health professionals were covered in this review, with the majority of publications concerning occupational therapy and physiotherapy followed by speech therapy and audiology. Whilst this review is focused on allied health practice, literature concerning GPs and MDs was also considered as there is considerable evidence surrounding their remote and rural practice that may provide useful information to AHP.

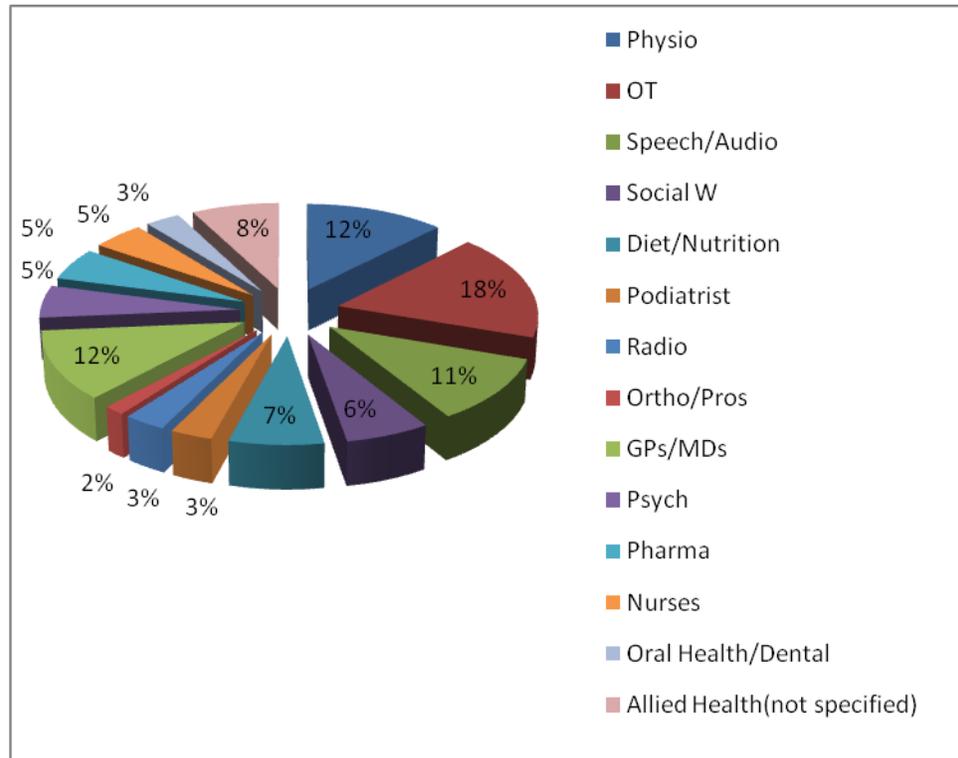


Figure 3: Distribution of publications as to health disciplines

