What do we really know about best practice allied health professional supervision? The challenges and rewards of preparing a systematic review and preliminary findings

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Abstract
The Allied Health Education and Training department at the Cunningham Centre, sought to synthesise the best available evidence on the experiences and effects of professional supervision across 16 allied health disciplines. Published and unpublished literature on the experience and effects of participating in supervision on allied health practitioner practice, service delivery and client outcomes is currently being reviewed, with a specific focus on geographically or professionally isolated practitioners. A multi-disciplinary working group was formed in early 2011 to develop a focused research question and parameters for the review. In order to assess the current evidence on the experience and effects of professional supervision for allied health, a systematic review methodology including both qualitative and quantitative literature was chosen. A systematic review protocol¹ was accepted for publication by the Joanna Briggs Institute in late 2011 with the comprehensive review due for completion in late 2012. A standardised keyword search of published and unpublished literature across 15 databases (including Medline, CINAHL, Psycinfo) as well as Dissertation Abstracts International and reference lists is currently underway. Once complete, standardised critical appraisal instruments from the Joanna Briggs Institute System for the Unified Management, Assessment and Review of Information package (JBI-SUMARI) will be used to assess methodological validity prior to inclusion in the review. The challenges and rewards of embarking on a systematic review will be shared during this presentation. Preliminary findings from the early stages of review completion will also be shared. Key findings include:

- a scarcity of high quality published research relating to allied health professional supervision, particularly in rural and remote settings
- an ever-increasing body of literature discussing the experiences and applicability of supervision across different disciplines
- one rigorous randomised control trial (in a metropolitan setting) demonstrating a clinically significant effect of face-to-face supervision of psychologists on client outcomes
- controversy over the effectiveness of supervision across distance.

Potential implications for professional supervision in rural and remote allied health services based on current evidence will be discussed.

Introduction
Professional supervision for clinical practice has been widely advocated as an important clinical governance and support mechanism in recent years²³ with many Australian state health departments developing and implementing professional support frameworks and resources⁴⁶. There is expressed need for enhanced professional support initiatives in rural and remote health services in order to support service delivery outcomes as well as staff recruitment and retention.⁷¹² With increasing adoption of professional support arrangements in both public and private health services, and across multiple disciplines, the purpose of embarking on a systematic review was to document the current high quality evidence on the experiences and effects of supervision both on allied health clinician practice and client outcomes, with a particular focus on non-metropolitan areas.

This paper will outline the process of conducting a systematic review within a government health training organisation; including the challenges and rewards experienced and preliminary findings thus far. First, definitions of a systematic review, professional support and supervision will be given. Next, a
presentation of the key findings from the published systematic review protocol\(^1\) including existing systematic reviews of professional supervision in other populations, and findings related to rural and remote allied health settings, will be overviewed. The methods and progress thus far will then be outlined before presenting preliminary findings and recommendations in light of the experience of conducting a systematic review in this area and preliminary results. A lack of rigorous primary research in non-metropolitan allied health populations and a similar lack of clear policy regarding research within non-university settings is highlighted and recommendations in both areas are made.

**What is a systematic review?**

The Joanna Briggs Institute (JBI) defines a systematic review as “essentially an analysis of the available literature (that is, evidence) and a judgement of the effectiveness or otherwise of a practice, involving a series of complex steps”\(^{13}\). A systematic review is considered to be the highest form of research evidence in a given area\(^{14}\) and is defined as a literature review that uses “transparent procedures to find, evaluate and synthesise the findings of relevant research”\(^{15}\). The JBI approach to completing a systematic review has a central focus not only on effectiveness of a given intervention, treatment or technique, but also on appropriateness, meaningfulness and feasibility\(^{13}\). That said, both qualitative research as well as quantitative research may be evaluated and synthesised as part of the JBI approach. As the complex area of allied health professional supervision within non-metropolitan settings was selected as an area for review, the JBI systematic review methodology was chosen as an appropriate approach.

The Allied Health Training and Education unit at the Cunningham Centre, Darling Downs Hospital and Health Service, embarked upon a systematic review in order to document the current available research evidence using transparent processes and ultimately share this with a wider audience. A systematic review working group was formed within the unit to guide the development of a review protocol. Once the protocol\(^1\) was peer reviewed and approved to commence by JBI, a primary reviewer (Ducat) commenced systematically searching the research literature using standardised search terms and documented inclusion/exclusion criteria on a monthly dedicated research day for the past twelve months and as available. Currently the search of the published literature is complete and moderation by a second party will soon be underway to ensure quality, consistent inclusion and exclusion of the papers found in the search. Once this is finalised, critical appraisal and synthesis of eligible literature will be undertaken before publication of the complete systematic review.

**Review objective/question**

As discussed further in the protocol\(^1\) published by JBI, the objectives of the comprehensive review are to “synthesise the best available evidence on the experiences and effects of professional supervision on allied health clinician practice and client outcomes across rural and remote health settings.” (p.1)

The review questions to be investigated are:

- What are the experiences of professional supervision for allied health professionals working in non-metropolitan settings?
- What are the effects of professional supervision on allied health practitioner practice and clients outcomes in non-metropolitan locations?

**Definition of allied health professional supervision**

There is some controversy regarding characteristics of professional supervision within the allied health disciplines. Multiple terms, including clinical and professional supervision and mentoring are commonly interchanged in the literature.\(^{16}\) Some literature blurs the line between operational supervision, which is focused on service and performance management, and professional supervision, which is focused on professional development and support.\(^{17}\) Critics of professional supervision may confuse professional supervision with operational supervision, or line management, as a tool to monitor staff performance.\(^{18}\)
It is also acknowledged that the allied health disciplines are not uniform in their uptake of professional supervision, including their levels of training, access and expectations. In spite of differences between professions, the aims, processes and methods of supervision—in particular what is likely to make supervision effective—are more similar than different across professions. For example, beneficial aspects of supervision for professional development include structured, regular participation where a supervisory relationship is marked by empathy, trust and genuine regard which is often referred to as a strong working alliance. Multiple papers have suggested the importance of supervisee-driven support (i.e. driven by the staff member receiving the supervision) and that supervisee choice of supervisor is beneficial.

For reasons identified above, a clear definition of professional support and supervision is important for the purposes of conducting a systematic review. First, professional support refers to participation in “...activities that create an environment where personal and professional growth may occur.” Professional supervision, which is one type of professional support activity, is defined as “a working alliance between two or more professional members in which the aim is to achieve a range of goals that can be broadly categorised into themes relating to (a) organisational/administrative functions, (b) clinical practice, and (c) provision of personal support to the employee”.

What was known at commencement of the review?

A search for existing systematic reviews, as well as a narrative review were completed as part of the protocol development. While a number of systematic and non-systematic reviews have been conducted investigating elements of supervision across the healthcare professions, none were found that addressed this specific area of interest, namely professional supervision in non-metropolitan allied health professionals.

The protocol describes this narrative review in further detail; however the following are key findings from the initial search for systematic reviews:

- Three Cochrane systematic reviews focused on the delivery of different aspects of supervision and professional support.
- The effect of educational outreach visits (EOVs), defined as a face-to-face visit to a healthcare professional in his or her own environment, on health professional practice and service delivery was systematically reviewed by the Cochrane Collaboration. All randomised trials of EOVs that included an objective measure of performance or client outcomes were included. EOVs alone were found to have a small, yet relatively consistent effect on medication prescribing and a modest to small effect on other forms of healthcare practice and the effect of EOVs was slightly superior to audit or feedback alone.
- Two Cochrane reviews investigated “continuing education meetings”, defined as attending lectures, workshops or courses—the first in 2001 and then an updated version in 2009. The first review documented that moderate improvements in professional practice were associated with interactive meetings but not didactic sessions. The later review however, found that both educational meetings and meetings combined with other interventions demonstrated improvement in health professional practice. However, this was less true for serious outcomes compared to less serious and not true for complex behaviour change. The authors concluded that along with educational outreach visits, feedback and audit, continuing education meetings had small effects on practice.
- Additional previous systematic reviews within the supervision and professional development field have investigated the effects of professional supervision within the context of psychotherapists and counsellors (where other allied health have been excluded), mental health nursing, medical education and social work.
Professional supervision in non-metropolitan services was chosen as the focus of the current systematic review due to the unique practice challenges faced by many regional, rural and remote allied health practitioners. These include poor accessibility, lack of resources and isolation, the complex demands of “specialist generalist” roles and issues of burnout and staff turnover.12

The protocol1 discusses this in further detail, though key findings prior to commencing the systematic review include:

- Trainee rural mental health professionals working without professional supervision reported lower job satisfaction and feelings of overwhelm, additional symptoms of burnout and provided lower service quality.27

- With respect to remote modes of supervision, studies show varying findings.

- Clinicians have expressed less satisfaction and willingness to participate in non-face to face supervision. For example, participants who were from multiple allied health professional backgrounds consistently indicated that a major barrier to good supervision was distance from the supervisor in one study.29

- Another study investigating differences between remote and local modes of supervision, found no significant difference between face-to-face formats and videoconferencing for trainee professionals.27 It is important to note a confounding factor in this study. Trainees had initial face-to-face visits prior to commencing remote supervision, as well as additional face-to-face meetings (as well as the distance supervision) throughout the research.

**Summary of methods**

The systematic review protocol1 details methods in depth. A summary of key parameters of the systematic review protocol are highlighted below. As this is a comprehensive systematic review, both qualitative studies, including phenomenology, grounded theory, narrative, ethnographic and action research studies; as well as quantitative studies including controlled trials (RCTs), quasi-experimental studies and observational studies are eligible for inclusion. The publishing timeframe for inclusion of studies is 2000 to mid 2012.

**The population of interest** is allied health professionals in the professions of Audiology, Clinical Measurement Sciences, Dietetics and Nutrition, Exercise Physiology, Medical Radiations Professions, Occupational Therapy, Orthoptics, Pharmacy, Physiotherapy, Podiatry, Prosthetics and Orthotics, Physiotherapy, Podiatry, Psychology, Social Work and Speech Pathology across regional, rural or remote locations health care settings (hospital, community health and private practice). Non-metropolitan practice is broadly defined as working in geographical or professional isolation due to varied approaches to assessing regional, rural and remote settings.

**Exclusion criteria** include: Students who are not employed as an allied health professional (e.g. allied health, medical and nursing students on clinical placements will be excluded); medical clinicians; nursing clinicians; health workers (other than allied health) and allied health assistants

**The phenomena and type of intervention** of interest is allied health professional supervision, including all styles of supervision such as face-to-face, telephone, videoconference or online to both individuals and groups. In contrast, the review will exclude studies focusing on line management, operational supervision other than the definitions provided earlier, journal club (without other supervisory activities), professional development, educational meetings, training activities or in-services (without other components of supervision as defined earlier), audit, mentoring and feedback only (without other components of supervision)
Search strategy. The search strategy aims to find both published and unpublished studies. The first search was for published studies in Medline, CINAHL and PsycInfo databases and the search for unpublished studies has not yet been completed.

Initial keywords that were used were:

(supervision or professional support or supervisee) and (allied health or mental health or psychol$ or physiot$ or speech therap$ or speech patholo$ or occupational therap$ or social work$ or or pharmaco$ or podiat$ or nutrition$ or diet$ or dieti$ or radiog$ or medical imaging or medical techn$ or medical radiation$ or audiolog$ or counsel$ or therap$ or clinical measurement$ or exercise physiology$ or orthoptic$ or orthotic$ or prosthetic$)

In addition, the first author consulted with a hospital and health service librarian to refine this search as well as using “snowballing” of the reference lists to uncover additional relevant literature.

Progress to date and preliminary findings
Currently, progress to date includes the following milestones in Figure 1.

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<tr>
<th>Date</th>
<th>Milestone Description</th>
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<tr>
<td>July 2010</td>
<td>Completed JBI systematic review training</td>
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<tr>
<td>Nov 2010</td>
<td>Formed AH multidisciplinary working group (monthly mtg)</td>
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<tr>
<td>July 2011</td>
<td>Completed protocol and submitted to JBI for peer review</td>
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<tr>
<td>Aug 2011</td>
<td>Revised protocol accepted for publication by JBI</td>
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<td>Jan 2012 to Dec 2012</td>
<td>Dedicated day per month</td>
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<td>• July 2012—Published literature search completed</td>
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<td></td>
<td>• Jan 2012—Completed first author review of published abstracts for inclusion or exclusion in the appraisal</td>
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Expected completion: June 2013

Challenges
As detailed in the figure above, the published literature search was completed in July last year. Since then, the second author has been seconded to another role and is no longer available to participate in the review, and the JBI computer software needed to appraise the literature is not currently accessible through the Dept of Health due to firewall restrictions. Once these issues have been addressed, the unpublished literature search will be completed as well as critical appraisal of included material using the JBI computer software. Challenges of conducting research in non-university settings will be discussed further in the conference presentation.

Rewards
Thus far, a protocol¹ has been published subject to peer review and a lengthy literature search using standardised key words has been conducted. While the systematic review is still in progress, these have been highly rewarding experiences in terms of successfully participating in synthesising the evidence base for our core business at Allied Health Education and Training and increasing local capacity to participate in research.
Over 1500 abstracts have now been reviewed to establish if they meet inclusion criteria for the systematic review. From the initial abstract search, 39 potentially met criteria. Review of these full papers has resulted in the likely inclusion of seven papers that will be discussed further in the conference presentation. These papers are awaiting a consensus check by a second reviewer; both in terms of ensuring they meet inclusion criteria, and consensus regarding their quality using JBI standardised critical appraisal tools. Once this is complete, eligible studies will be included in the final synthesis as part of the systematic review.

Incidental rewards from participating in this review include developing a repository of published research in the area of professional supervision and particularly allied health professional supervision. Preliminary findings suggest that while there are a significant number of reviews on professional supervision, only a handful of controlled, quantitative studies or high quality qualitative studies have been conducted in allied health populations.

Studies have focused on investigating clinician satisfaction and professional benefits of supervision, and some of these studies have been conducted in non-metropolitan areas. It is also encouraging that there are emerging findings demonstrating associations between professional supervision and client outcomes within metropolitan areas. Findings from one metropolitan study supported the contribution of supervision on client symptom reduction, i.e. that interventions provided by clinicians who were in a professional supervision arrangement, were associated with enhanced client outcomes compared with those provided by non-supervised clinicians. Another study used regression models in non-experimental data to demonstrate unique contributions of supervision variables to changes in antisocial youth behaviour. The scarcity of high quality research leads to the recommendation for more primary research into allied health professional supervision, particularly in non-metropolitan areas.

**Recommendations**

While the systematic review is not complete, and comprehensive findings are not available at this stage, the extensive search of the published literature reveals some important preliminary findings. The first is the lack of rigorous primary research in this unique context and the second relates to the challenge and reward of research conducted in a non-university setting.

**Recommendation One:** Primary research into the experience and effect of professional supervision for non-metropolitan allied health professional practice and client outcomes is needed.

Specifically the following studies are recommended:

- Qualitative research exploring the experience of professional supervision and perceived impact on practice using a triangulation of perspectives (clinician, supervisor, line manager & client perspectives)

- Quantitative research manipulating aspects of professional supervision in non-metropolitan allied health services and investigating quantitative outcomes and particularly impact on client quality of life and treatment progress.

This recommendation echoes recent national efforts to support primary research into student clinical supervision, including the Health Workforce Australia (HWA) National Clinical Supervision Fellowship Initiative whereby 16 research fellowships have been recently been awarded to projects involving primary research into effective student clinical supervision nationwide.

**Recommendation Two:** A clear direction regarding research in non-university health settings is required to enhance uptake of rigorous and highly translatable clinical research, particularly in non-metropolitan settings.

On one hand, research and evidence based practice are endorsed within health organisations and on the other hand, difficulties finding time “off line” and accessing necessary resources to participate in...
research continue. A clearer vision around staff participation in research, including guidelines for departmental resources available for research, and a sustainable mentoring model to foster and encourage high level clinical research is needed. The reward of having highly translatable and rigorous research is argued to outweigh the challenges of participating in research in a non-university setting. A clear framework needs to be in place in order to provide a path for future, high quality research endeavours in non-university settings and provide clear pathways for collaboration between government and research organisations.

References


