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Clinical Supervision Frameworks for Allied Health Professionals: A Systematic and Critical Review

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Abstract

Purpose: Clinical supervision is an important element of professional support for allied health professionals and contributes to the provision of safe, high quality patient care and health professional wellbeing. Structured clinical supervision frameworks have been recommended to improve access and effectiveness of clinical supervision for allied health professionals by providing practical guidance and increased consistency. However, there is limited evidence relating to the availability and quality of clinical supervision frameworks for allied health. **Method:** A systematic and critical review was conducted to identify and appraise clinical supervision frameworks for allied health. Included were peer-reviewed studies and grey literature documents, available in full text and written in English. Six databases and government and professional association websites were searched. The AGREE Health Systems Guidance (AGREE-HS) tool was used to appraise framework quality. Three researchers independently reviewed the frameworks and reached consensus on scores through discussion. AGREE-HS scores were analysed descriptively. **Results:** Twenty-six frameworks were appraised by the AGREE-HS including 7 peer-reviewed studies and 19 grey literature documents. Over half of all frameworks were from Australia, and the profession/s that they related to were most commonly allied health, social work, or psychology. The combined mean of the AGREE-HS final items scores for all studies/documents was 14.5 (SD = 4.0) out of a possible score of 35. Frameworks published in peer-reviewed studies used more robust methods to inform their development than frameworks sourced from the grey literature. In contrast, grey literature frameworks were often more clearly outlined, succinct, practical, and flexible for stakeholders to implement. **Conclusions:** There are limited published frameworks available for allied health professionals, and the frameworks that do exist are generally of low quality. As a result, many existing frameworks may not provide the practical guidance required to improve clinical supervision practice and optimise the benefits of clinical supervision. It is recommended that future policy relating clinical supervision needs to focus on the development of common, evidence-based allied health clinical supervision frameworks. Future frameworks should be practically orientated and use robust methods and evaluation to inform their development and implementation.

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Clinical supervision frameworks for allied health professionals: a systematic and critical review

Abstract

Purpose: Clinical supervision is an important element of professional support for allied health professionals and contributes to the provision of safe, high quality patient care and health professional wellbeing. Structured clinical supervision frameworks have been recommended to improve access and effectiveness of clinical supervision for allied health professionals by providing practical guidance and increased consistency. However, there is limited evidence relating to the availability and quality of clinical supervision frameworks for allied health. Method: A systematic and critical review was conducted to identify and appraise clinical supervision frameworks for allied health. Included were peer-reviewed studies and grey literature documents, available in full text and written in English. Six databases and government and professional association websites were searched. The AGREE Health Systems Guidance (AGREE-HS) tool was used to appraise framework quality. Three researchers independently reviewed the frameworks and reached consensus on scores through discussion. AGREE-HS scores were analysed descriptively. Results: Twenty-six frameworks were appraised by the AGREE-HS including, 7 peer-reviewed studies and 19 grey literature documents. Over half of all frameworks were from Australia and the profession/s that they related to were most commonly allied health, social work or psychology. The combined mean of the AGREE-HS final items scores for all studies/documents was 14.5 (SD = 4.0), out of a possible score of 35. Frameworks published in peer-reviewed studies used more robust methods to inform their development than frameworks sourced from the grey literature. In contrast, grey literature frameworks were often more clearly outlined, succinct, practical and flexible for stakeholders to implement. Conclusions: There are limited published frameworks available for allied health professionals and the frameworks that do exist are generally of low quality. As a result, many existing frameworks may not provide the practical guidance required to improve clinical supervision practice and optimize the benefits of clinical supervision. It is recommended that future policy relating clinical supervision needs to focus on the development of common, evidence-based allied health clinical supervision frameworks. Future frameworks should be practically orientated and use robust methods and evaluation to inform their development and implementation.

Background

Allied health professionals make a significant contribution to health and social care systems, optimising the health and wellbeing of patients.[1,2] While there is no agreed definition of allied health across different settings and jurisdictions, professions often described as allied health include physiotherapy, occupational therapy, speech pathology, dietetics, podiatry and exercise physiology and, in the Australian context, social work and psychology.[3-5] Clinical supervision is widely practised amongst allied health professions as a mechanism for clinical governance and to support professional wellbeing.[6]

Clinical supervision has been defined as "the formal provision, by approved supervisors, of a relationship-based education and training that is work-focused and which manages, supports, develops and evaluates the work of colleague/s".[7 p. 440] It is proposed that clinical supervision contributes to the provision of safe, high quality healthcare by promoting evidence-based practice, improving clinical reasoning and creating opportunities for reflection and feedback.[6] Clinical supervision assists professional wellbeing by helping allied health professionals to manage the emotional demands of practice by providing a confidential space to discuss clinical issues and has been found to reduce professional isolation and burnout, particularly for rural allied health professionals.[6,8,9]

Issues relating to the standards of clinical supervision for health professionals in the United Kingdom have been identified as a contributing factor to serious breaches of patient safety.[10] In Australia, health system failures in recent years have highlighted the need for health services to ensure that there are appropriate systems and processes in place for effective clinical governance to ensure the delivery of safe and quality clinical care.[11] Internationally, health systems are also undergoing significant change. For example in Australia, current changes include aged care reforms,[12] the implementation of the National Disability Insurance Scheme,[13] an increasing emphasis on reducing hospital lengths of stay,[14] and the impact of the COVID-19 pandemic.[15,16] Significant healthcare change has been reported to negatively impact health professionals wellbeing and lead to feelings of constantly "having to do more with less".[17] Clinical supervision has been highlighted as a factor to support allied health professionals maintain professional resilience during times of change.[18]

There are many definitions and interpretations of clinical supervision, with a lack of consensus across allied health professions regarding what clinical supervision is and how it should be implemented.[19,20] Much of the historical basis for the practice of clinical supervision in allied health is derived from social work and psychology which has impacted on how clinical supervision is conceptualised and practised in the other allied health professions.[10] There is relatively little evidence for best practice models of clinical supervision for allied health professions beyond social work and psychology.[7]

Although clinical supervision is well-accepted and widely practised amongst allied health professionals, there are inconsistent expectations for access to clinical supervision and processes, training and resources, to support best practice approaches.[7,21] Issues relating to lack of access to clinical supervision have been highlighted in rural and regional settings where allied health professionals may be professionally and geographically isolated.[22,23] There are also differences in the perceived effectiveness of clinical supervision across allied health professions, with a number of recent studies reporting that psychologists, social workers and occupational therapists perceived that their clinical supervision was effective while physiotherapists and dietitians reported lower levels of perceived effectiveness.[24-26]

A repeated recommendation of recent Australian research has been the need for practical, structured clinical supervision frameworks, specifically developed for allied health, to address inconsistencies and to improve the quality of clinical supervision for allied health.[7,27-29] A number of clinical supervision frameworks have been developed to provide guidance to health professionals and health care organisations in the implementation and practice of clinical supervision.[30-34] Clinical supervision frameworks described in the literature usually consist of numerous components, such as a conceptual "model" or "map" that helps guide practitioners by outlining parameters for the practice of clinical supervision.[30] Other framework components may include a protocol or guideline that outlines the roles and responsibilities of supervisees, clinical supervisors and managers; recommendations for the evaluation and measurement of the framework's implementation; and tools and resources that can support clinical supervision practices and/or preparation and training of clinical supervisors.[19, 30, 35] These components are used to optimise the effectiveness of clinical supervision through informing practice and evaluation.[30]

While some government agencies and professional and regulatory bodies in Australia and the United Kingdom have recently developed clinical supervision frameworks or policies for allied health,[32-34,36] these are limited to relatively few professional groups and jurisdictions therefore they are not available for a significant proportion of allied health professionals. Where clinical supervision frameworks are available, there is limited evidence relating to their quality and utilisation.[30] It is unclear whether the clinical supervision frameworks available for allied health are providing guidance that will improve the quality of clinical supervision practice.

Aims

The aim of this review was to examine the existing evidence for allied health clinical supervision frameworks, assess their quality and identify gaps. The objectives of this review were to 1. Identify existing allied health clinical supervision frameworks for clinical supervision of allied health professionals, 2. Assess the quality of frameworks with an emphasis on their suitability to provide practical guidance to allied health professionals and health service managers employing allied health professionals, 3. Make recommendations for the further development or implementation of existing frameworks or inform the development of future frameworks and 4. Inform future policy directions relating to clinical supervision implementation.

Methods

Search methods

The review included peer-reviewed quantitative and qualitative studies of any research design. A detailed search strategy was developed prior to an initial search of electronic databases being undertaken on October 31, 2018 and a subsequent search on March 20 2020. The following search terms were used: (supervis* or clinical supervis* or professional supervis* or staff supervis*) and (model or framework or policy or guideline or manual or review or toolkit or implementation plan) and (allied health or physiotherap* or occupational therap* or social work* or speech pathology* or speech therap* or speech and language therap* or diet* or podiatr* or exercise physiolog* or psycholog*). Databases searched included the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE (Ovid), Cumulative Index Nursing and Allied Health Literature (CINAHL) (EBSCO), EMBASE (Ovid), ProQuest (Nursing and Allied Health Database) and PsychInfo. An example of a search strategy from the ProQuest database is provided in a supplementary file (see Supplementary file 1).

Clinical supervision frameworks developed by government or professional organisations documents are often located in the grey literature, therefore the grey literature was also searched. Using the search terms for the database search as a guide, a search of grey literature was conducted to identify clinical supervision frameworks published on organisation or government websites, while the Cochrane database and Google Scholar were included in the search.

Eligibility criteria

Eligibility criteria were established prior to the search of electronic databases and grey literature. To be eligible, studies/documents had to: be written in English, published in peer-reviewed journals or on government/organisational websites, available as full texts, published after 2000, have a primary focus on clinical supervision and allied health, and describe a framework or model that could be used for practical guidance. The scope of the review is clinical supervision of qualified allied health professionals, rather than undergraduate students or supervision for higher degree by research students.

Definitions

The terms “framework”, “model” and “theory” are inconsistently applied and often used interchangeably in the literature,[35,37] including in research relating to clinical supervision. This review focused on frameworks that provide guidance and recommendations for the implementation of clinical supervision theory into practice, therefore definitions derived from the field of implementation science were used. Included were structured frameworks that could inform policies, decision making and judgments for the implementation of effective clinical supervision practice. Implementation frameworks have been described in research implementation science as “action process models”.[35] Process models specify steps (stages, phases) to guide the process of translating research into practice, including the implementation and use of research. An *action process model* provides practical guidance in the planning and execution of implementation endeavours and/or implementation strategies to facilitate implementation.[35] The terms “model” and “framework” can both be used to describe the concept of an action process model. Alternate terms used to describe frameworks may include policy framework, health service guideline, manual, review, toolkit and implementation plan.[38] Studies describing theories or conceptual models and frameworks were not eligible for appraisal.

Identification of included papers

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were used as a reference for reporting this review.[39] The initial screening of titles and abstracts of all located studies were conducted by one researcher and then full texts were retrieved for those not excluded at this stage. Full text studies and grey literature documents were then reviewed independently by two researchers against the inclusion criteria. Where there was disagreement on inclusion of studies, consensus was reached by discussion between the two reviewers, with a third reviewer involved where necessary. The reference lists of eligible studies were examined to identify potential studies that were not identified through the initial search process.

Method quality appraisal

The Appraisal of Guidelines for Research and Evaluation - Health Systems (AGREE-HS) was used to appraise the quality of the identified frameworks.[38] This tool was developed to assess the quality and usability of documents, providing guidance for health services and reported to be a usable, reliable and valid tool.[41-44] The AGREE-HS was adapted from the AGREE-II tool which has been widely used for the appraisal and development of clinical guidelines.[4,41]

The AGREE-HS tool contains 5 items, each of which are rated on a 7-point Likert scale from lowest quality (1) to highest quality (7). The first item, *Topic*, refers to the how well the health system issue and its causes are described and the relevance of the guidance. *Participants* examines the composition of the team developing the framework and the management of team member and funding conflicts. The third item, *Method,* includes the use of systematic methods to consider evidence to inform the framework, effectiveness and cost-effectiveness and the weighting of benefits and harms. The *Recommendations* item focuses on how well the anticipated outcomes are described, the comprehensiveness of the guidance, ethical and equity considerations, and details for operationalising and updating the guidance. The final item, *Implementability*, is concerned with barriers to implementing the recommendations, resource and sustainability issues, how flexible/transferable the guidance is and the plan for disseminating, monitoring and evaluating the impact of the guidance. The AGREE-HS tool also includes two questions relating to overall assessment of the framework, specifically whether the reviewers would recommend the framework in the appropriate context and also their own context. A detailed description of the AGREE-HS items is included in Appendix 1.

Three researchers independently assessed each of the identified frameworks according to the instructions in the AGREE-HS user manual.[38] The researchers then met to reach a consensus score for each AGREE-HS item and the overall assessment of the frameworks. Final items scores were calculated using the summed consensus scores for each item. The highest score possible was 35 and the lowest score possible five.

[Refer to Appendix 1: Overview of AGREE-HS tool items]

Data analysis

AGREE-HS data were analysed descriptively. Total AGREE-HS scores for peer-reviewed and grey literature frameworks, and combined frameworks, presented as mean and standard deviation. Post-hoc analysis (independent samples t-test) was performed on the total and individual item scores for peer-reviewed and grey literature frameworks to enable comparison of the respective categories.

Results

The database search yielded a total of 1392 studies. Duplicates were removed and the remaining 1117 studies were screened by title and abstract. Six additional studies were included following a review of reference lists. After title and abstract screening, 84 studies were included for full text review.

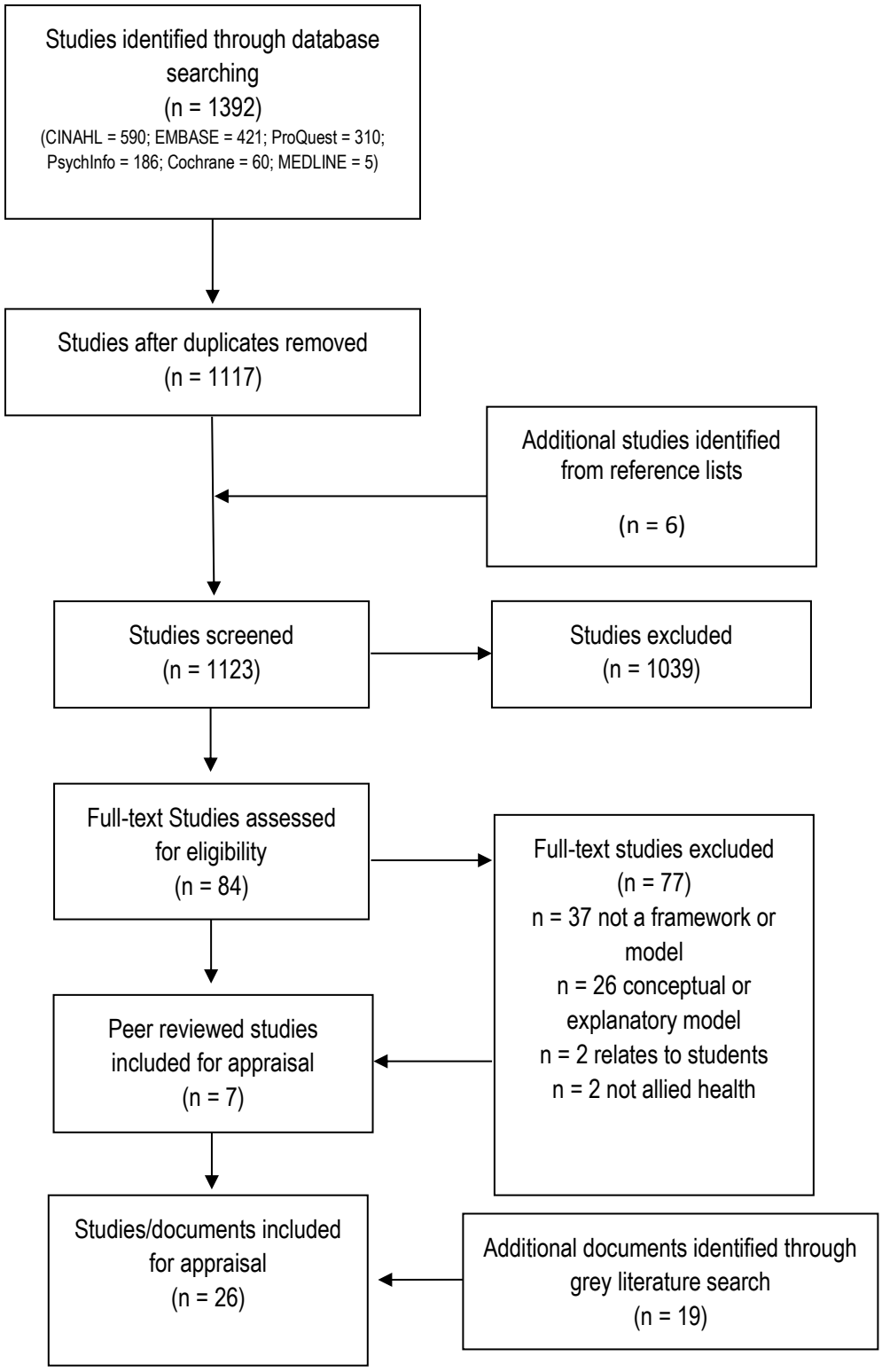

Figure 1: PRISMA flow chart

Twenty-six studies describing conceptual models of clinical supervision relating to allied health were excluded. These models were mostly developed for psychology and social work. A total of 26 studies/documents were included for AGREE-HS appraisal, with seven peer-review studies and 19 grey literature documents.

The characteristics of the included peer-reviewed studies are described in Table 1. Three of the seven studies were from Australia. Five of the studies were broadly relevant for allied health working in the health and community services sectors. Three peer-reviewed studies were from social work, two were multidisciplinary while two were from psychology and occupational therapy.

Table 1: Characteristics of peer-reviewed studies included for AGREE-HS appraisal (n = 7)

Author/year	Title	Country	Professions included	Industry sector
Lee et al., 2018 [42]	Developing a Working Model of Cross-Cultural Supervision: A Competence- and Alliance-Based Framework	Canada	Social work	All sectors
Dugmore et al., 2018 [43]	Systemic supervision in statutory social work in the UK: systemic rucksacks and bells that ring	United Kingdom	Social work	Children's services
O'Donoghue et al., 2018 [44]	Constructing an evidence-informed social work supervision model	Unspecified (authors from New Zealand, Singapore and Hong Kong)	Social work	All sectors
Morris et al., 2017 [45]	A framework to support experiential learning and psychological flexibility in supervision: SHAPE	Australia	Psychology	All sectors
Nancarrow et al., 2014 [30]	Connecting practice: a practitioner centred model of supervision	Australia	Allied health	Rural health
Brayman et al., 2014 [46]	Guidelines for Supervision, Roles, and Responsibilities During the Delivery of Occupational Therapy Services	United States	Occupational therapy	All sectors
Hall et al., 2014 [47]	Professional support framework: improving access to professional support for professionals	Australia	Allied health	Health

The characteristics of the included frameworks sourced from the grey literature are outlined in Table 2. Over half were from Australia and a third were from the United Kingdom. Five were developed for allied health, three specifically related to social work and psychology and two were specific for allied health professions working in mental health. The grey literature documents were mostly developed for a broad range of sectors, with seven relevant frameworks across health and community services and five for health care settings. The other main sectors represented were mental health and alcohol and other drugs services. Eight grey literature frameworks have been developed since 2014.

Table 2: Characteristics of grey literature documents included for AGREE-HS appraisal (n = 19)

Author/ Organisation, Year	Title	Country	Professions included	Industry sector	Commissioned/ developed by
Occupational Therapy Australia, 2019 [48]	OT Australia Professional Supervision Framework	Australia	Occupational therapy	All sectors	OT Australia
Victorian Department of Health and Human Services, 2019 [49]	Victorian Allied Health Clinical Supervision Framework	Australia	Allied health (includes allied health science professions)	Health and community services	DHHS Victoria
New South Wales Health, 2015 [33,50]	NSW Health Clinical Supervision Framework (including The Superguide: a handbook for supervising allied health professionals)	Australia	Medicine, nursing and allied health	Health	NSW Health - Health Education and Training Institute
Roth et al., 2015 [revised version] [51]	A competence framework for the supervision of psychological therapies	United Kingdom	Psychology	Health and community settings	Originally commissioned for NHS Education for Scotland
Australian Association of Social Workers, 2014 [52]	AASW Supervision Standards	Australia	Social work	Health and community settings	Australian Association of Social Workers
South Australia Health, 2014 [53]	Allied Health Clinical Supervision Framework	Australia	Allied health professionals (not further specified)	Health	SA Health Allied and Scientific Health Office
The British Psychological Society, 2014 [54]	DCP Policy of Supervision	United Kingdom	Clinical psychologists	Health	The British Psychological Society Division of Clinical Psychology
National Association of Social Workers and The Association of Social Work Boards, 2014 [55]	Best Practice Standards in Social Work Supervision	United Kingdom	Social work	Health and community settings	NASW and ASWB

The British Association of Social Workers, 2011 [56]	UK Supervision Policy	United Kingdom	Social work	Health and community settings	The British Association of Social Workers
Government of Western Australia Drug and Alcohol Office, 2011 [57]	Clinical Supervision Handbook	Australia	Not specified	Alcohol and other drugs	WA Drug and Alcohol Office
New Zealand Psychologists Board, 2010 [58]	Guidelines on Supervision	New Zealand	Psychology	Health and community services	New Zealand Psychologists Board
National Health Service Lanarkshire, 2010 [59]	Professional/Clinical Supervision Handbook for Allied Health Professionals	United Kingdom	Allied Health (Speech and language Therapy, Occupational Therapy, Physiotherapy, Audiology, Dietetics, Podiatry)	Healthcare	National Health Service Lanarkshire
Queensland Health, 2009 [60]	Clinical Supervision Guidelines for Mental Health Services	Australia	Mental health professions	Mental health	Queensland Health
Victorian Healthcare Association, 2008 [61]	Clinical Supervision in Community Health: Introduction and Practice Guidelines	Australia	Not specified	Community Health	Victorian Healthcare Association funded by the Victorian Department of Human Services
Western Australia Department of Health [1], 2008 [62]	Professional Support: Clinical Supervision for Allied Health Professionals	Australia	Allied health professionals (not further specified)	Rural health	WA Country Health Service
College of Physical Therapists of Alberta, 2008 [63]	Supervision Resource Guide for Physical Therapists	Canada	Physical therapists	Health and community services	College of Physical Therapists of Alberta

Ask et al, 2008 [64]	Clinical Supervision: A practical guide for the alcohol and other drugs field	Australia	Alcohol and other drugs professions	Alcohol and other drugs	National Center for Training and Education on Addiction
Western Australia Department of Health [2], 2005 [65]	Clinical Supervision: Framework for WA Mental Health Services and Clinicians	Australia	All clinical staff in public mental health services	Mental health	Western Australia Department of Health
Society of Radiographers, 2003 [66]	Radiography Clinical Supervision Framework	United Kingdom	Radiography	Healthcare	The College of Radiographers

A summary of the characteristics of all frameworks and comparisons of peer reviewed and grey literature frameworks are described in Table 3. The combined mean of the AGREE-HS final items scores for all studies/documents was 14.5 (SD = 4.0) out of a possible total score of 35. The mean of the final items scores was slightly higher for peer-reviewed studies (M = 15.2, SD = 3.5) than for grey literature documents (M = 14.3, SD = 4.2). The mean scores of the AGREE-HS items (scored between 1 and 7) that were rated highest were for Topic (M = 3.3, SD = 1.3) and Recommendations (M = 3.7, SD = 1.3). When considered overall, the frameworks scored higher for items that involved providing rationale for the need for guidance in clinical supervision practice and having recommendations that could be operationalised. Lower scores were recorded for the AGREE-HS items relating to Participants (M = 2.5, SD = 0.8), Methods (M = 2.6, SD = 1.2) and Implementability (M = 2.7, SD = 1.1). The items that were rated lower in quality overall were those relating to inadequate expertise and diversity amongst the developers, using appropriate evidence and systematic methods to inform the framework's development. The items relating to having strategies for implementation, such as those associated with cost and sustainability, and including methods for monitoring and evaluation, were rated lower across the combined peer-reviewed and grey literature frameworks.

Table 3: Summary of included studies and documents characteristics and comparison of means and standard deviations of AGREE-HS items (n = 26)

Professions included	Industry sector	Country	Topic	Participants	Methods	Recommend-ations	Implement-ability	Total
Peer-reviewed (n = 7)								
Social work = 3 ***Allied health = 2*** ***Psychology = 1*** ***Occupational therapy =1***	*All sectors = 5* *Children's services = 1* *Rural health = 1*	*Australia = 3* *United Kingdom = 1* *Canada = 1* *New Zealand = 1* *United States = 1* *International = 1*	3.71 (1.38)	2.57 (1.13)	3.42 (1.39)*	2.85 (0.69)	2.71 (1.38)	15.28 (3.81)
Grey literature (n = 19)								
Allied health = 5 **Psychology = 3** **Social work = 3**	All sectors = 7 Health = 5	Australia = 10	3.15 (1.25)	2.42 (0.76)	2.31 (1.00)	3.68 (1.20)*	2.68 (1.05)	14.26 (4.27)

Mental health = 2 **Medicine/nursing and allied health = 1** **Occupational therapy = 1** **Physiotherapy = 1** **Alcohol and other drugs = 1** **Not specified = 2**	Mental health = 2 Alcohol and other drugs = 2 Rural health = 1 Community health = 1	United Kingdom = 6 Canada = 1 New Zealand = 1						
Combined frameworks (n = 26)								
Allied health = 7 **Social work = 6** **Psychology = 4** **Occupational therapy = 2** **Mental health = 2** **Medicine/nursing and allied health = 1** **Alcohol and other drugs = 1** **Not specified = 2**	All sectors = 12 Health = 5 Mental health = 2 Rural health = 2 Children's services = 1 Community health = 1	Australia = 13 United Kingdom = 7 Canada = 2 New Zealand = 2 United States = 1 International = 1	3.30 (1.28)	2.46 (0.84)	2.61 (1.20)	3.46 (1.13)	2.69 (1.10)	14.53 (4.11)

* Post-hoc analysis demonstrated difference in AGREE-HS scores between peer-reviewed and grey literature frameworks reached statistical significance (p = 0.05)

The AGREE-HS scores for peer-reviewed and grey literature frameworks are shown in Table 4. When considering the peer-reviewed studies alone, the highest individual items mean scores were for Topic (M = 3.7, SD = 1.3) and Methods (M = 3.5, SD = 1.3), whereas for the grey literature documents, the highest individual items score was for Recommendations (M =3.7, SD = 1.2). Post-hoc analysis comparing the individual items mean scores for peer-reviewed and grey literature frameworks showed that there were significant differences between Methods and Recommendations. This indicates that the peer-reviewed studies scored higher in the item relating to using robust evidence and methods, such as systematic reviews, to inform the frameworks' recommendations. In contrast, the grey literature documents scored higher than the peer-reviewed studies in the item that relates to recommendations that were clear, succinct and easy to interpret. Individual items scores for Implementability and Participants were low for both peer-reviewed studies and grey literature documents.

Table 4: AGREE-HS appraisal of peer-reviewed studies (n = 7) and grey literature documents (n = 19)

Author/year	Topic	Participants	Methods	Recommendations	Implementability	Total score
Peer-reviewed						
Lee et al., 2018	4	1	4	4	3	16
Dugmore et al., 2018	5	3	3	3	4	18
O'Donoghue et al., 2018	3	2	5	3	2	15
Morris et al., 2017	3	2	3	3	2	13
Nancarrow et al., 2014	6	4	5	2	2	19
Brayman et al., 2014	2	2	1	2	1	8
Hall et al., 2013	3	4	3	3	5	18
Grey literature						
Occupational Therapy Australia, 2019	6	2	5	5	5	23
Victorian Department of Health and Human Services, 2019	4	3	4	5	4	20

NSW Health, 2015	4	4	2	5	3	18
Roth et al., 2015	4	3	4	4	4	19
Australian Association of Social Workers, 2014	2	2	2	5	2	13
SA Health, 2014	3	2	2	4	4	15
The British Psychological Society, 2014	3	3	2	5	3	16
National Association of Social Workers and The Association of Social Work Boards, 2013	2	3	2	4	2	13
The British Association of Social Workers, 2011	4	2	2	3	2	13
Government of Western Australia Drug and Alcohol Office, 2011	1	1	2	2	1	7
New Zealand Psychologists Board, 2010	2	2	1	2	2	9
NHS Lanarkshire, 2010	4	4	3	4	3	18
Queensland Health, 2009	4	2	2	4	3	15
Victorian Healthcare Association, 2008	3	2	2	3	2	12
College of Physical Therapists of Alberta, 2008	2	2	1	2	1	8
Western Australia Department of Health [1], 2008	3	2	2	2	2	11
Ask et al., 2005	5	3	2	4	3	17
Western Australia Department of Health [2], 2003	2	2	2	5	3	14
Society of Radiographers, 2003	1	1	2	2	1	7

The frameworks which received the highest scores were developed by Occupational Therapy Australia [23] and the Victorian Department of Health and Human Services [20]. These frameworks were both grey literature documents from Australia. The highest scores for frameworks from peer-reviewed studies were those developed by Nancarrow et al. [30] and Hall et al. [47], which were also Australian.

Discussion

Clinical supervision frameworks for allied health are mostly located in the grey literature. The models and frameworks described in peer-reviewed literature were more conceptual or theoretical. Most frameworks included in this review were multidisciplinary and where specified, were likely to have been developed for allied health professions including physiotherapy, occupational therapy, social work, dietetics, speech pathology, psychology and podiatry. Where frameworks were developed for an individual profession, these were mostly for social work or psychology. The frameworks often lacked detail describing the sectors that they were developed for, but they were often broadly relevant for allied health professions working in health and community services sectors. Specific sectors included mental health and alcohol and other drug services.

The majority of frameworks appraised were developed in Australia, which is consistent with much of the published clinical supervision research for allied health professions in the last decade.[7,67] The need for practical allied health clinical supervision frameworks to improve the quality of clinical supervision practice has been a recommendation from a number of recent Australian studies.[26,37,68,69] This may partly explain the number of frameworks developed by Australian state governments and professional bodies since 2014.

The quality of the frameworks reviewed was variable and generally low. There was little difference between the overall quality of peer-review studies and those from the grey literature aside from the individual items relating to Methods and Recommendations. As expected, peer-reviewed studies used more robust evidence and methods to inform their development, including systemic reviews. Many grey literature documents included little or no description of how evidence informed their development and used limited referencing of research evidence. Recommendations made in grey literature documents were often clearly outlined,

succinct, practical and flexible for stakeholders to implement. When considering the development of future clinical supervision frameworks, a combination of the respective strengths of peer-reviewed studies (more robust use of evidence to inform the framework development) and grey literature documents (providing clear and practical recommendations) would result in better overall quality.

The application of the AGREE-HS items highlighted common methodological flaws across the frameworks. Most frameworks did not factor in cost of supervision and considerations around the cost-effectiveness of framework implementation. The costs of clinical supervision are often difficult to calculate due to being unable to separate time spent in clinical supervision from clinical practice and a lack of tangible outcomes from clinical supervision.[9,70,71] A better estimate of costs is needed in relation to benefits that may assist stakeholders, such as health service organisations, to prioritise the implementation of framework recommendations for allied health.

Few frameworks referenced principles relating to professional ethics and diversity in their development or recommendations. Therefore, factors relating to gender, race, culture and vulnerable groups of workers and their patients may not be adequately addressed in clinical supervision.[72-74] Many frameworks did not consider factors that would enhance their implementation and sustainability. These included the anticipated barriers of introducing the framework, methods and tools for evaluating its impact and plans for updating the framework. This may explain the reported poor uptake of clinical supervision frameworks for allied health.[7,19]

Relatively simple considerations could improve the quality of clinical supervision frameworks for allied health. Many frameworks did not describe who developed the framework, however, when these were described, there was often a lack of diversity of the developers/contributors, including lack of multidisciplinary or participants from various sectors and lack of service consumer input. Ensuring that a range of stakeholders have input into the development of frameworks and adequate description of their roles and affiliations, would improve the credibility and trustworthiness.[75] Many frameworks did not adequately describe how consensus was reached in the development of recommendations. Use of consensus methods by framework developers such as Delphi or stakeholder reference groups, could ensure that recommendations are relevant and acceptable for their audience, and are able to be practically implemented.[76]

The developers of the AGREE-HS tool specify that the tool can be used to assist in the development of new frameworks.[77] Using such a tool to guide framework development could improve framework quality, by drawing attention to identified weaknesses, such as representative selection of developers and use of robust and transparent methods. Another potential advantage of using such a tool would be to improve evaluation methods of framework implementation. Evaluation was rarely considered across frameworks and needs to be included in the future for continuous quality improvement and successful implementation.

There are now many local jurisdictions, such as government agencies or professional bodies, who have developed clinical supervision frameworks for allied health. However, there are still significant gaps in framework availability, depending on sector and profession, and the frameworks that do exist are of variable quality. There are several potential reasons for the framework limitations including lack of visibility of clinical supervision and reduced recognition of allied health on the health policy agenda,[1,77] flawed processes for developing health policy,[78] limited resources to assist in framework development and unclear evidence to support positive patient outcomes from clinical supervision.[8,9] As recommended by Fitzpatrick, a pragmatic way to address these barriers would be to develop national allied health clinical supervision frameworks which apply across professions and jurisdictions.[19] This policy initiative would require robust and inclusive methods for development and proper consideration of implementation and evaluation.[78] Such frameworks could be broad, flexible and overarching, complemented by guidelines for individual professions that outline any profession-specific approaches to clinical supervision. Of the existing frameworks, those from Occupational Therapy Australia and Victorian Department of Health and Human Services provide examples of a profession-specific and an interprofessional framework as a basis for the development of a common allied health clinical supervision framework.

The recently developed AGREE-HS tool has had limited application thus far, having been used to assess the quality of health system guidance documents such as those from the World Health Organisation and the National Institute for Clinical Excellence.[79] This is the first time that the authors are aware that the tool has been used for a specific health system topic such as clinical supervision, and the first time that the AGREE-HS appraisal has included peer-reviewed studies and frameworks developed for specific organisations or professional associations. The authors perceived that the AGREE-HS tool was easy and relatively time efficient to use with the item descriptions flexible enough to be relevant and applicable for frameworks described in peer-reviewed studies and grey literature documents. Initially there was variation in the individual reviewer's scores for particular items. The reviewer discussions of scores to reach consensus assisted standardisation of the approach to scoring, reducing variation. The reviewers recommend this consensus method for those using the AGREE–HS tool in the future. While the

reviewers included the overall assessment questions relating to whether they would recommend the framework in their context/the appropriate context for their appraisal, these questions would be more useful to inform agencies on whether they would use a specific framework rather than as an objective assessment of the frameworks' quality. The developers of the AGREE-HS stipulate that the elements within each item can be ranked or modified a priori. This has been suggested as a mechanism to strengthen other appraisal tools and, although not undertaken for this review, would help to prioritise which aspects of frameworks have a stronger influence on the overall assessment of quality.[80]

There were limitations associated with this review. While authors tried to locate difficult to source frameworks through citation tracking, searching of government and professional association websites, and hand searching, existing frameworks may have been omitted, particularly those in the grey literature. Frameworks were appraised using only the information available within the document, with supplementary information included only if referred to in the document and where this information was publicly available. Some of the frameworks may have included this information elsewhere, such as details regarding the authors' credentials or methods of development, which was not used in the appraisal process. Two of the reviewers had potential conflicts of interest regarding the frameworks appraised. One reviewer was project manager for the development of one the frameworks, and another reviewer is a current president of a healthcare professional association. While the reviewer did not appraise the frameworks where there was a conflict of interest, this may have been a potential source of bias.

Conclusion

There are limited published frameworks available for allied health professionals and the frameworks that do exist are generally of low quality and are poorly evaluated. As a result, many existing frameworks may not provide the practical guidance required to improve clinical supervision practice and optimize the benefits of clinical supervision, such as improved clinical governance and health professional wellbeing. It is recommended that future policies relating to clinical supervision need to focus on the development of common, evidence-based allied health clinical supervision frameworks. Future frameworks should be practically orientated and need to use robust methods and evaluation to inform their development and implementation.

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Appendix 1

Overview of AGREE-HS items

AGREE-HS Item	Description	Criteria
Topic	Description of the health system challenge, the causes of the challenge and the priority accorded to it, and relevance of the guidance.	• The health system challenge is clearly described (i.e., the nature of the challenge; the magnitude, frequency or intensity of the challenge; the populations affected). • The causes of the health system challenge are clearly described. • The health system challenge is described in terms of its level of priority in the targeted health system and the affected population; arguments to support the priority classification are provided. • The guidance is relevant to (i.e., timely in relation to when decisions will be made), and appropriate for, the health system challenge, the system or sub-system needs, the target population(s), and the setting(s) in which they will operate.
Participants	Composition of the health systems guidance development team and the management of competing interests and funder influence.	• The health systems guidance development team includes members who have an interest or stake in the recommendations (e.g., decision makers, program managers, operational leaders, consumers and members of the public). • The health systems guidance development team is multidisciplinary (e.g., political scientists, economists, epidemiologists, methodologists). • The health systems guidance development team is multi-sectoral (e.g., primary care, public health and, if appropriate to the challenge, finance and housing). • Competing interests of the health systems guidance development team members (e.g., financial, professional), and the strategies used to identify and manage them, are clearly described. • Precautions have been taken to avoid or to minimize the influence of a funding agency.
Method	Use of systematic methods and transparency in reporting; the use of the best available and up-to-date evidence; the consideration of effectiveness and cost-effectiveness of the potential options; and the weighting of benefits and harms in the guidance document.	• Systematic and transparent methods were used to identify and review the evidence (e.g., integrated review, scoping review, review of the grey literature, systematic review). • The best available and most contextually relevant evidence was considered. • The evidence base is current. • Evidence of effectiveness of the potential options is clearly described, including descriptions of the contexts in which the options were tested. • Evidence of cost and cost-effectiveness of the potential options is described. • The weighting of the benefits and harms of the potential options is described. • There is a link between the recommendations and evidence. • The rationale behind the recommendations is clear. • Systematic and transparent methods were used to agree upon the final recommendations (e.g., informal or formal consensus, Delphi method, nominal group methods).

Recommendations	Outcomes orientation and comprehensiveness of the guidance; the ethical and equity considerations drawn upon in its development; the details for its operationalization; the sociocultural and political alignment of the guidance; and the updating plan.	The anticipated outcomes of implementing the recommendations are clearly described (including indicators, performance thresholds or targets, and standards to measure them). • The recommendations are comprehensive and provide direction to all relevant health system levels (e.g., national, provincial/state), subsystems (e.g., cancer, mental health) and sectors (e.g., primary care, public health). • The ethical principles used to develop the recommendations are described. • The recommendations promote equity among the target population (e.g., in terms of age, sex, gender, culture, religion, race, sexual orientation). • The recommendations' acceptability to, and alignment with, sociocultural and political interests were considered. • The recommendations are easily identifiable, clear, and succinct. • The recommendations are actionable and are sufficiently detailed to be operationalized. • A plan for updating the recommendations is described.
Implementability	Barriers and enablers to implementing the recommendations; the cost and resource considerations in implementing the recommendations; the affordability of implementation and anticipated sustainability of outcomes; the flexibility and transferability of the guidance; and the strategies for disseminating the guidance, monitoring its implementation and evaluating its impact	Barriers and enablers to the implementation of the recommendations are described, including factors that are internal (e.g., resources, incentives, administrative structure) and external (e.g., legal system, social system, state of the economy, corruption, beliefs) to the health system. A plan to mitigate barriers and optimize enablers is included. • Cost and resource considerations for the recommended actions are described (e.g., money, time, infrastructure, equipment, administrative capacity, supplies, staffing, and training). • The stakeholders' acceptability of the recommendations is described. • The affordability of the recommendations, in the context where implementation will take place, is described. • The anticipated sustainability and requirements to maintain long-term outcomes is described. • The recommendations are flexible and there is a description of how they can be adapted or tailored for specific contexts in which they will be implemented. • A description of the degree to which the recommendations are transferable to other similar or different contexts is provided. • Strategies for disseminating the health systems guidance are described. • Strategies for assessing the implementation process and the impact of the recommendations are described.