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SYSTEMATIC REVIEW

Models of clinical supervision of relevance to remote area nursing & primary health care: A scoping review

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Abstract

Introduction: Nurses in remote primary health care settings work in difficult conditions, in isolated and disadvantaged communities, and often must work beyond their scope to provide advanced assessments and treatments to support the community. Therefore, remote area nurses require support to develop their skills and knowledge to work safely within their full scope of practice. Clinical supervision is widely used in health professions for this purpose; however, models of supervision for nursing have not been implemented or evaluated within remote primary health care settings.

Objective: The purpose of this study was to search the literature to source suitable clinical supervision models that could pertain to the remote area nursing context.

Design: An initial search of the literature found no clinical supervision models developed for remote or isolated practice nurses so a scoping review was conducted searching for publications related to advanced practice generalist health practitioners in primary health care, including practice nurses, nurse practitioners and general practitioners. This was seen as a suitable substitute because the phenomena of interest were the model of supervision rather than the specific skills or knowledge being developed.

Findings: The scoping review search yielded 251 articles from 5 journal databases of which 11 articles met the inclusion criteria. Each clinical supervision model was described and synthesised using qualitative description. The 11 models of clinical supervision had differing formats including; individual and group clinical supervision, in-person, telephone, medical records review and video case study.

Discussion: Whilst several models were described in the literature, none were directly transferrable to the remote area context. The absence of supervision for cultural safety was significant. There was a variety of modes including face-to-face, virtual, individual and group proposed. Cultural considerations were lacking in all of the models.

Conclusion: Our study recommends a hybrid clinical supervision model suitable for consultation and validation through pilot testing with remote area nurses. There is potential for this model to be used globally in isolated contexts due to the option of virtual participation.

KEYWORDS

general practitioners, health resources, nursing education research, quality of health care, scope of practice, scoping review

1 | INTRODUCTION

Australia has a vast landmass of 7.6 million square kilometres,[1] with 1.9% of the population living in remote or very remote areas which constitute approximately 85% of the landmass.[2] Ninety-one per cent of Indigenous Australians who live remotely recognise an area as their homeland or traditional country.[3] People residing in remote Australia have increased health risks and mortality and lower access to appropriate health care.[2] This is common throughout the world in rural and remote settings.[4]

'Rural and remote' are terms often used interchangeably; however, there are unique distinctions between them. For example, remote communities in Australia are characterised by significant cultural differences; they may be highly mobile, live within a lower socioeconomic environment and with higher levels of unemployment than rural communities. These isolated populations are physically difficult to access and have a lower number of health and social services, which mean there are greater challenges to obtain health care.[5] In terms of nursing care, the more remote a nurse works the increased amount of generalism and advanced practice is required for clients that have a higher burden of disease.[5–7] Remote area nurses (RANs) are 'a registered nurse/midwife whose scope of practice encompasses broad aspects of Primary Health Care and requires a generalist approach. The practice most often occurs in an isolated or geographically remote location. The RAN/M is responsible, in collaboration with others, for the continuous, coordinated and comprehensive health care for individuals and their community'.[8]

Whilst it is difficult to make comparisons between what is considered remote, the Modified Monash Model (MMM) in part does this. The MMM was developed to distinctly classify areas according to their rurality and remoteness for health professionals. A major city is classified as a 1, and a very remote setting is classified as a 7.[9] For the purposes of this article, 'remote' encompasses areas that are classified as 6 or 7 according to the MMM.

There is a need for health professionals including nurses, midwives and doctors to be generalists when they practice out of an urban setting due to lack of access to specialised care.[10] Remote area nurses (RANs) have high levels of role satisfaction due to the diversity in the breadth of the role, including the need to be innovative in challenging circumstances.[7,11,12] RANs work similarly to general practitioners and nurse practitioners in providing a range of primary health care services.[12,13] Primary health care is defined by the World Health Organisation as 'a whole-of-society approach to effectively organize and strengthen national health systems to bring services for health and wellbeing closer to communities. It has 3 components: integrated health services to meet people's health needs throughout their lives, addressing the broader determinants of health through multisectoral policy and action, [and] empowering individuals, families and communities to take charge of their own health'.[14] RANs provide a wide variety of care for the whole of community, for all stages

What is already known on this subject?

- Remote area nurses work in stressful conditions in advanced practice roles for which there is little preparation.
- Remote area nurses are generalists and require clinical skills and knowledge across the lifespan and across diverse population health needs.
- Remote area nurses require support in developing their confidence and competence in order to practice safely.

What does this study add?

- This review identified several aspects of different models of clinical supervision that may provide properties helpful in creating a specific framework to support remote or isolated practice nurses.
- The proposed model is contextualised for the isolated generalist practitioner by providing face-to-face or virtual modes.

of life, work with other health professionals and specialists and are often the first and only health contact in a remote community[7,12,15]; for example, they may drive the ambulance, respond to in-hours and out-of-hours emergency calls and provide pharmaceuticals,[15,16] or they may provide care for sexual health, aged persons, child health, immunisations, pregnant women, wound care, chronic diseases or palliative care.[17–19] They also conduct broader work in the community such as health promotion and community development.[7]

The Australian Primary Health Care Nurses' Association recommends that primary health care nurses should work in and to the full breadth of their scope of practice.[13] Despite requiring the ability to work at an advanced level, RANs are not necessarily competent or confident in providing advanced care.[7] Advanced practice nurses are recognised as working in difficult roles that involve expertise, critical thinking, independent practice and complex decision-making.[20,21] RANs sometimes work beyond their scope of practice because they are working alone or are responding to uncommon clinical presentations. Therefore, RANs practice autonomously at an advanced level often without adequate oversight.[22]

Practicing at an advanced level without adequate training and support contributes to the finding that RANs have a higher-than-average score for psychological distress.[23] Besides safety concerns, poor management and workplace staffing issues, other contributors to stress include the responsibilities and expectations for the chronic high workload and advanced practice role.[23,24] For example, the expectation of RANs to undertake new generalist tasks for which they have not developed the skills or confidence to perform provokes anxiety.[7]

Studies indicate that when given the chance to develop skills and knowledge in remote health practice which are crucial for optimum patient care, individuals report an increase in knowledge, confidence, competence and preparedness to work in remote nursing settings.[15] Therefore, to retain staff and increase job satisfaction, it is recommended that nurses receive personal and professional support, for example, supervision with learning, developing and applying new skills in the remote health setting.[24,25] Furthermore, the development of skills and knowledge in generalist settings may assist in overcoming issues related to working in a resource-poor environment.[7] It has been suggested that to assist RANs to work within their scope, support and supervision are required when transitioning from an acute care setting to the remote health setting.[7]

Clinical supervision aims to improve quality, safety and challenge standards of care[26] and is not considered performance management or managers providing direction.[27] 'Mentoring' and 'preceptorship' are often used interchangeably for 'clinical supervision' in rural and remote nursing practice.[28] Whilst there are some similarities,[29] the functions of each are different. Precepting or preceptorship involves a senior nurse directly supervising a junior or student nurse whilst performing clinical tasks[30] to develop their confidence and competence in the role.[29] Mentoring in nursing, similarly, is a planned pairing of a more experienced person with a less experienced person; it, however, has the attributes of role modelling, nurturing, friendship and regular meetings and persists over an extended duration.[31]

Falender and Shafranske[32] provided a definition that explains the purpose and rationale of clinical supervision that would be suitable for RANs. They state that clinical supervision is:

> a distinct professional activity in which education and training aimed at developing science-informed practice are facilitated through a collaborative interpersonal process. It involves observation, evaluation, feedback, facilitation of supervisee self-assessment, and acquisition of knowledge and skills by instruction, modelling, and mutual problem-solving. Building on the recognition of the strengths and talents of the supervisee, supervision encourages self-efficacy. Supervision ensures that [care] is conducted in a competent manner in which ethical standards, legal prescriptions, and professional practices are used to promote and protect the welfare of the client, the profession, and society at large.[32]

This study is focused on finding a model that facilitates the development of the clinical skills needed for the generalist role and the supervision required to determine whether a nurse is competent and confident in particular knowledge commonly required in the isolated practice setting such as comprehensive patient assessment, cultural competence, clinical reasoning and skills such as suturing and plastering, immunisation and a variety of other functions of the primary health care role.

Literature suggests that nurses engaged in clinical supervision feel well supported and provide higher quality of care to patients than those not receiving clinical supervision.[26,33] This is particularly so for nurses who are developing their skills and knowledge in advanced practice as clinical supervision results in greater clinical reasoning and safer clinical practice.[34] Importantly, when nurses are faced with stressful situations, it is recommended that formal clinical supervision is employed to develop social support, self-care and mechanisms of coping to combat vicarious trauma.[35]

McCullough et al.'s[36] theory 'Making compromises to provide PHC' was developed due to the lack of understanding of the multifaceted role of RANs, and it provides a substantive framework to guide the development of support, education and resource requirements in applying primary health care in a remote setting. It describes four foundations of RAN practice which are as follows: understanding the social world, the availability of resources, clinical knowledge and skill, and shared understanding and personal support. To address shortfalls in these areas, the following is suggested: developing an understanding of primary health care, growing the ability to work in isolation, and with a generalist scope, and growing a collegial network. Furthermore, the recently released, National Rural and Remote Generalist Framework 2023–2027 was developed in recognition of the unique context and core capabilities that rural and remote nurses require. It encompasses four domains, which are culturally safe practice, critical analysis, relationships, partnerships and collaboration, and capability for practice. The framework is a guide for nurses to map their development, for educators to teach skills or develop curriculum and for government and non-government organisations to support the rural and remote nursing workforce in its entirety. The framework is not prescriptive in how this is performed.[37]

Despite the benefits of clinical supervision noted by a range of health professions, there appears to be a lack of clinical supervision in the RAN field. A preliminary review of the literature indicates clinical supervision has been utilised in nursing in Australia within mental health and aged health care settings,[38] which are neither generalist nor primary health care nursing roles, and despite several published articles recommending RANs undertake clinical supervision,[7,24,39] no peer-reviewed articles could be found regarding a framework on how to implement clinical supervision in the remote context.

Addressing the knowledge gap related to clinical supervision models in the remote nursing setting is likely to provide a framework for implementation and evaluation of clinical supervision and a related education program. It is expected that clinical supervision may improve health outcomes from remote communities and job satisfaction for RANs due to improved clinical skill, knowledge and support for RANs.

The research question that the scoping review sought to answer was: What clinical supervision models are reported in the literature that could be used for nurses working in remote health practice? The research specifically aimed to identify models of clinical supervision that could be used by generalist health professionals in primary health care, models that support a competency-based clinical supervision definition and models that could be appropriate for a remote primary health care setting.

2 | MATERIALS AND METHODS

A scoping review is a method that is used to identify characteristics or factors related to a concept[40] and has the ability to sort through a breadth of methodologies and analyses.[41]

Therefore, a systematic approach was taken to searching the literature to find as wide a range of clinical supervision models as possible that may be relevant to the remote setting. A systematic search was conducted using the Preferred Reporting Items for Systematic Reviews (PRISMA) to manage the large dataset of journal articles that currently exists for clinical supervision in health care. A robust search criteria and inclusion and exclusion framework ensured that applicable articles were narrowed to be manageable for the short time frame of this project, without excluding essential evidence. Figure 1 demonstrates the PRISMA framework applied to this process.

The search strategy started with a selection of keywords according to the PICO framework. A PICO protocol is populated to frame the research question into search terms for a review of literature. It includes population, intervention, context and outcome.[42] Keywords were used that were reflective of the research question, to yield accurate data. These included 'primary health care' or 'primary

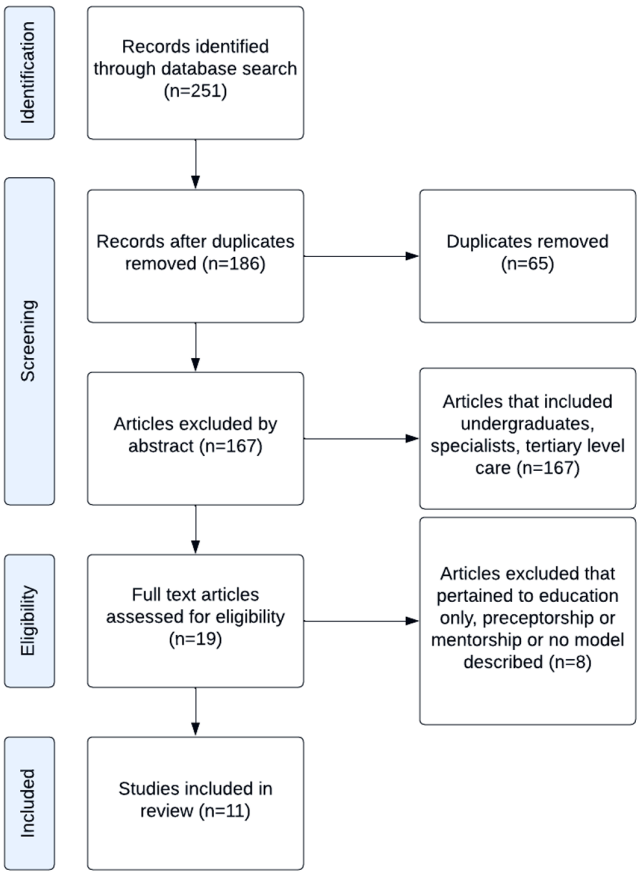

FIGURE 1 PRISMA process for scoping review.

care' AND 'clinical supervision' or 'professional supervision'. The search strategy included the use of Boolean operators (and, or). Extracted articles were managed in a spreadsheet with the abstract recorded.

This search was undertaken using the electronic databases CINAHL, MEDLINE, Embase, Johanna Briggs Institute and Web of Science as these databases were recommended by the institution librarian being the most comprehensive databases for health sciences (L. Munro, personal communication, 10 June 2022), with the most recent data search undertaken April 2023.

Inclusion and exclusion criteria (as per Table 1) were applied in order to focus the search results to contemporary, peer-reviewed publications relevant to the setting. Inclusion criteria included any papers written in English that referred to and described a specific clinical supervision model. Studies that included nurse practitioners, general practitioners and practice nurses were eligible as they practice at an advanced generalist level in primary health care settings, roles which have the greatest synergy with RANs. Articles published in peer-reviewed journals were included. Inclusion criteria required all articles to be specific to the primary health care setting. Articles published between 1997 and 2022 were included. Articles for inclusion were selected via a double screening method, which involved two reviewers meeting to discuss the outcomes of the search strategy to negotiate and nominate whether articles were included.[43]

Exclusion criteria included any articles that examined clinical supervision for undergraduate students or health professionals who required direct constant supervision, such as a physician's assistant. Health professionals who did not work in a generalist capacity in primary health care such as pharmacists, surgeons and mental health nurses were excluded.

2.1 | Ethical considerations

Because scoping reviews are high-level documents that have the ability to influence change, particularly with patient outcomes, they need to be conducted in a transparent and rigorous manner.[40] However, as this scoping review is dealing with secondary data and not directly recruiting participants, this is considered a negligible-risk research project.[44] An ethics application was submitted for the project, and it was deemed exempt from undergoing approval by the research ethics review (Edith Cowan University—03392). A data management plan was accepted by the organisation.

2.2 | Data analysis

Data analysis used a qualitative description approach. This pragmatic methodological approach describes rich data without overlaying deep interpretations to the dataset as is found in thematic analysis.[45–47] Analysis began with the process of collating the selected research articles. Each article was reviewed individually, and characteristics were recorded in an extraction table created using the attributes of clinical supervision as defined by Falender and Shafranske[32] which included observation, evaluation, feedback, facilitation, instruction, modelling, mutual problem-solving and self-efficacy.

Further data extracted included information in regard to the unique context in which RANs work, including their requirement to work at an advanced level within their scope of practice, generalism, and isolated location and role conditions.

Data analysis continued by comparing and contrasting descriptions of the clinical supervision models, this information was interpreted through a lens of suitability to a generalist primary health care professional and specifically, the RAN role. This perspective was grounded in McCullough's theory and the personal experience of remote nursing of the authors.

Of particular consideration was whether the model supported the health practitioner to operate within their scope of practice, and what logistical issues might be an enabler or barrier to implementation. The team discussed and interpreted the potential suitability for the remote context extensively and memos documented these discussions for future reference. The results have been reported here according to qualitative descriptive methods.

TABLE 1 Exclusion and inclusion criteria.

Exclusion	Inclusion
Undergraduate student cohort	Written in English
Nongeneralists: for example, pharmacists, surgeons, mental health nurses	Referred to specific clinical supervision model
Role requiring direct constant supervision: for example, physician's assistant	Primary health care specific
Published outside of last 25 years	

3 | RESULTS

A total of 11 articles met the inclusion criteria which described a specific clinical supervision model.[48–58]

Within the 11 articles, six focused on general practitioners, four focused on practice nurses, and there was one article that focused on nurse practitioners.[48–58] All articles had a model that utilised a peer of the same profession for supervisor and supervisee; however, one of the models made use of general practitioners for clinical supervision of practice nurses. The clinical supervision models and/or cohorts were located in rural and metropolitan Australia, the United Kingdom and Denmark, and the USA.[48–58]

Nine models provided initial training to supervisors, ranging in length of time from 2 to 4 days.[48–58]

3.1 | Overview of clinical supervision models

The 11 articles described eight different styles of a clinical supervision model, which are summarised in Tables 2 and 3 below.

3.2 | Key attributes

Falender and Shafranske,[32] attributes of; observation, evaluation, feedback, facilitation, instruction, modelling, mutual problem-solving and self-efficacy formed the framework for data analysis and are used for the presentation of findings below. Where a model has not explicitly described an attribute, it has not been included in this section.

3.2.1 | Observation

Variance in activities relating to observation was seen across the models. Observation of the supervisee was often performed apart or delayed from the patient consultation situation. An attendance certificate with reflection themes of the clinical supervision encounter was provided to supervisees in the NHS Direct telephone model,[48] and case notes were observed in the Random Case Analysis model to ascertain whether there were gaps in knowledge.[53] The Kalymnos model provided a retrospective observation of a patient interaction.[55] However, current direct observation of clinical competency was rarely mentioned, except in the case of the beta-LACTAM and Flags for Seeking Help models, where in-person, in-consultation observation was provided.[57,58]

3.2.2 | Evaluation

Evaluation of the supervisee was conducted in several ways within the Random Case Analysis, NHS Direct, Kalymnos, Flags for Seeking Help and beta-LACTAM models. As a snapshot in time in the Random Case Analysis model, the supervisor considers whether the intervention/s in the case notes were appropriate.[53] Similarly, the NHS Direct model includes the Johns model of reflection, which incorporates analysis of the supervisee's experience.[48] The Kalymnos model likewise utilises self-evaluation following the group session to note their feelings and which parts of the discussion were useful.[55]

The Flags for Seeking Help model employed a dynamic evaluation process in which the supervisee and supervisor negotiate statuses of 'in-consultation', 'deferred-discussion' and 'discussion optional but always welcome' with advancing levels of competence.[57] The beta-LACTAM model prompts evaluation of in-consultation assessment and treatment by both giving permission for the supervisor to 'think aloud' and 'manage with' the supervisee.[58]

3.2.3 | Feedback

Feedback was only described in three models. The beta-LACTAM model provided immediate, time-sensitive feedback to supervisees whilst in-consultation to ensure the supervisee was moving in the correct way forward.[58] Similarly, the Flags for Seeking Help model provided feedback in the form of a discussion after an initial supervision session, where the pair would discuss the expectations of the adaptable triggers for seeking help.[57] The Trainee & Supervisor Reflection, Feedback & Debriefing Guides employed a method of mutual reflection on the clinical supervision session to prompt and feed into a feedback session.[54]

In the Kalymnos model, feedback was given immediately postcase presentation in an indirect fashion to the supervisor and group. However, it was performed retrospectively with the presentation of a video case of a previous consultation.[55]

In a broader sense, the NHS Direct model provides a summary of themes recorded in the attendance certificate from the clinical supervision session.[48] More specific feedback is given when the Random Case Analysis model analyses and feeds back on issues identified in

TABLE 2 Summary of clinical supervision models.

	Description of model	Cohort	Underlying framework
NHS Direct telephone	Nurses book a telephone meeting with a supervisor who used scripted questions as prompts and documented in a database and then a certificate of attendance provided with summary of themes and space for reflections	Primary care nurses, practice nurses, NHS Direct nurses	Johns model of structured reflection, 'conflict management, ethical mapping, availability, Heron's 6 categories, intervention analysis and transactional analysis' (Thompson & Winter, 2003).
Clinical Nursing Leadership Learning and Action Process	Focused on supporting primary care nurses to develop their leadership abilities.	Primary care nurses	Executive co-coaching which 'uses evidence-based management and leadership interventions in addition to perceiving the client as a whole person with the sole aim of promoting and enhancing effective processes for learning, leading and living' (Alleyne & Juma, 2007).
The Local Clinical Supervision Model for Practice Nurses	Pilot program of clinical supervision run over 12 months period, GPs were enlisted as supervisors and lunchtime sessions were held regularly for supervisors to review progress and provide forum for discussion. Stipulated only 3 h of clinical supervision to be held within 12 months period.	Practice nurses	No detail provided
Sheffield Health Authority Clinical Supervision Training Programme	Pilot program of clinical supervision run over 6 months period.	Practice nurses	No detail provided
Ealing Primary Care Trust Supervision Skills	Narrative approach of supervision which allowed supervisees to see issues with a new perspective and encourage the individual to develop their own solutions without being provided with the answers. Group met 6–8 weekly to discuss and practice supervision.	Fourteen GPs and one practice nurse	Three-day workshop to underpin clinical governance in primary health care and provide peer support
Random Case Analysis	Retrospective random audit of case notes. Training for supervisors included workshops and role-playing with mock case notes.	General practitioners	Aimed to identify and explore areas that the supervisee does not realise is a gap in their clinical knowledge. Two-day workshop for supervisors initially.

case notes to account for any unconscious knowledge gaps. This study also states that 15.8% of supervisors contacted a patient or changed their care management as a result of Random Case Analysis; however, it is not mentioned whether the supervisee was included in these transactions.[53]

3.2.4 | Facilitation

Facilitation was described in all of the models; however, some models applied facilitation in a unique fashion. For example, the Kalymnos model utilised the scripted prompts, only allowing the group to speak amongst themselves therefore removing a top-down power dynamic. The supervisor in this case facilitated the session by guiding it, for example, deciding when reflections should cease and interviewing the supervisee.[55] Both the Kalymnos and Ealing Primary Care Trust Supervision Skills models rotated facilitator roles so the entire group had an opportunity to lead the process.[52,55]

The RCA and NHS Direct models were heavily facilitated by the supervisor entirely guiding the process; however, the NHS Direct model was scripted with a database capturing responses.[48,53] In both the Flags for Seeking Help and beta-LACTAM model, the supervisee was responsible for contacting and enabling the supervision session. On the contrary, the supervisor facilitated at times, when managing for, and agreeing on triggers with the supervisee.[57,58]

TABLE 3 Continuation of summary of clinical supervision models.

	Description of model	Cohort	Underlying framework
beta-LACTAM	Supervisor prepares setting prior to consultation, including physical settings and appointment scheduling, and negotiates the requirements of in-person support. Presents a supervision framework with patient consultations in mind.	General practitioners	WWW-Doc supervision model (Ingham, 2012) for teaching students 'on the fly'. Supervisory Styles (Brown et al., 2018) incorporating 'managing for', 'managing through' and 'managing with' a supervisee when dealing with a patient.
Flags for Seeking Help	Nested under the beta-LACTAM model. Developed to trigger a response for style and timeliness of supervision during supervisee patient consultations. Specific scenarios developed between supervisor and supervisee to illustrate the urgency and best style of contact (e.g. supervisor can be interrupted, or can discuss with supervisor via email following consult).	General practitioners	beta-LACTAM
Trainee & Supervisor Reflection Feedback & Debriefing Guides	Guides to prompt questions to allow for reflection, debrief and feedback, tailored for the supervisor and the supervisee. Individuals are encouraged to reflect individually and meet together to discuss.	General practitioners	beta-LACTAM
Kalymnos	In a group, two individuals present a video-recorded patient consultation. Prompted by a script, the group would discuss the case back and forth using a method to open 'windows' throughout the session. This format was developed and trialled to embrace a nonjudgemental approach to clinical supervision.	General practitioners	The Inner Consultation (Neighbour, 2005) & Pendleton et al. (2003). Window supervision model (Coles, 1989).
Critical Companionship Model	A reflective model that enables critical dialogue with supervisees. Processes involve 'consciousness-raising', 'problematization', 'self-reflection', and 'critique'. These are correlated with 'articulation of craft knowledge', 'observing, listening & questioning', 'feedback on performance', 'high challenge support' 'critical dialogue' 'role modelling' and 'using self'.	Nurse practitioners	Critical Companionship Model Titchen (2003)

3.2.5 | Instruction

The use of instruction was absent from the majority of the models; however, the beta-LACTAM model allowed the supervisor to 'manage through or with', which provided the level of direction.[58] The Flags for Seeking Help model was also direct, in that instructions were provided from the supervisor on when and how to seek assistance prior to reaching autonomous practice.[57]

3.2.6 | Modelling

Modelling also had low representation in the majority of articles.[48–56] Modelling was inherent in Flags for Seeking Help model as the supervisor and supervisee negotiated and discussed how serious a trigger was and what the appropriate response would be.[57] The Kalymnos model used role play during the case presentation by the group members, to explore what the patient might be experiencing, which also demonstrated another paradigm of the clinical supervision process.[55]

The beta-LACTAM model provided three levels of management postassessment of the situation and patient. Importantly, if the supervisee is not ready in terms of confidence or competence, the supervisor overtly manages the care of the patient, giving the supervisee an opportunity to learn from supervisor modelling.[58]

3.2.7 | Mutual problem-solving

The beta-LACTAM model encompasses 'managing for', 'managing through' and 'managing with', with

the latter two being a collaborative approach to case management.[58] In a similar vein, the Flags for Seeking Help model is a collaborative approach in that the in-consultation supervision approach is negotiated depending on the acuity and severity of the case. In this model, supervision can be undertaken via email, phone, message or face-to-face; it can occur in or out of patient hearing or deferred to between consultations, at the end of the day, for a scheduled teaching session, or before the next appointment.[57]

The Kalymnos model on the contrary is less overt but does involve input from multiple parties by involving a whole of group discussion who consider a variety of options, with the supervisee responding to the pertinent points at the summation of the interview.[55] Similarly, the Ealing Primary Care Trust Supervision Skills model provides a means by which the supervisor and supervisee discussed a scenario, and a reflecting team listened and watched the conversation. The supervisor or supervisee could request ideas from the reflecting team whenever weighing up a difficult element to the conversation.[52]

3.2.8 | Self-efficacy

Both the Kalymnos and Random Case Analysis models retrospectively examine clinical cases, allowing for the inherent autonomy of the generalist role.[53,55] The NHS Direct model also employs a retrospective approach; however, the reflection prompts direct the individual to how they can move forward with the case/s utilising their own problem-solving methods.[48]

Both the Flags for Seeking Help and beta-LACTAM models employ real-time support as required and enable the supervisee to build up self-efficacy. For example, the Flags for Seeking Help model enables autonomy with a safety net of prenegotiated triggers for real-time support and then subsequent negotiations follow after the consultation.[57] The beta-LACTAM model employs the final stage of 'managing' to 'managing with' in which the supervisor and supervisee discuss their clinical opinion as equals.[58]

A proposed model

This scoping review was performed to establish what clinical supervision models currently exist for generalist health professionals working in remote locations, and whilst the models had valuable components, there was not a single model that was wholly appropriate for nurses working in remote health practice. Therefore, the synthesised data from these models were combined with McCullough's theory as a framework to identify relevant components and gaps for future development. We remind readers of the theory components. The four key issues that prevent the delivery of primary health care are identified as follows: understanding the social world, availability of resources, clinical skills and knowledge and shared understanding and personal support.

Table 4 presents the synthesis of clinical supervision models from this scoping review. Of note are the elements of resourcing, living and working within a different culture from their own, and the physical distance between supervisor and supervisee that are not adequately addressed in existing models.

4 | DISCUSSION

The hybrid model proposed in this paper (Figure 2) goes some way to developing a suitable model for remote and

TABLE 4 McCullough et al.'s (2020) theory 'The Core Issue – Inability to provide PHC' synthesised with clinical supervision models.

Integration of clinical supervision models in response to McCullough et al.'s (2020) theory: The core issue: Inability to provide PHC			
Understanding the social world	Availability of resources	Clinical skills and knowledge	Shared understanding and personal support
Further inquiry required	1, 3, 6, 7, 8, 9	3, 5, 6, 7, 8, 9, 10, 11	5 & 10 and further inquiry required
Clinical supervision model key			
1. NHS Direct telephone 2. Clinical Nursing Leadership and Action Process 3. The Local Clinical Supervision Model for Practice Nurses 4. Sheffield Health Authority Clinical Supervision Training Programme 5. Ealing Primary Care Trust Supervision Skills 6. Random Case Analysis 7. Beta-LACTAM 8. Flags for Seeking Help 9. Trainee & Supervisor Reflection, Feedback & Debriefing Guides 10. Kalymnos 11. Critical Companionship Model			

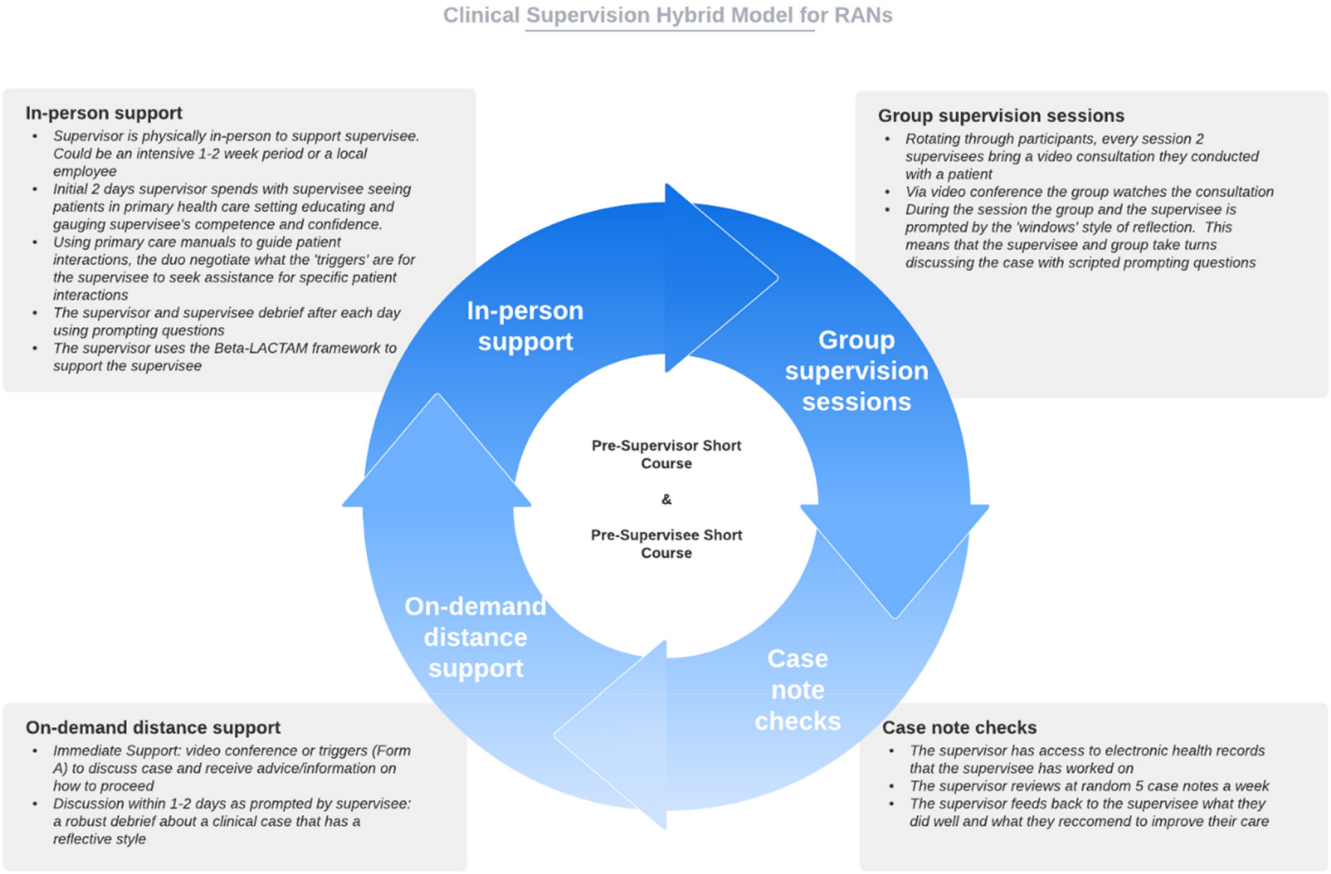

FIGURE 2 Clinical supervision hybrid model for remote area nurses.

isolated practice. The model should be considered in light of the clinical practice needs of RANs, and these are outlined in the clinical procedures and guidelines manuals available to guide most RAN practice. The primary clinical care manuals which RANs use in the remote primary health setting to guide them on assessing, diagnosing and providing treatments, include dispensing medication.[59] The Flags for Seeking Help model links in well with these manuals because the supervisor and supervisee could use the manual to discuss which items the supervisee is not confident or competent in performing, and how or when they might contact the supervisor for guidance in these clinical encounters. In relation to working towards autonomous practice, both the Critical Companionship Matrix and Flags for Seeking Help are geared towards developing competence in a progressive manner with structured support for each stage of learning and development.

The models interrogated in this scoping review did not provide guidance for culturally safe interactions within the supervisor or supervisee relationship, or with patients. This is a fundamental component of the rural and remote health framework and nursing standards of practice in Australia;[37,60] this element is particularly important as remote and isolated communities have a high proportion of First Nations residents.[2,3] The Kalymnos model contained elements of sensitivity to a supervisee's needs by providing a nonconfrontational framework, however, that was in a Denmark community of GPs, which may not be generalisable to other settings. Further inquiry into clinical supervision and cultural safety and capability would be of benefit, particularly in relation to remote-dwelling Indigenous populations in Australia. It is possible that cultural safety supervision could best be conducted by a member of the local community who may not be another health professional. This aspect requires further exploration.

Reflection featured heavily as an attribute in the majority of models; however, the Falender and Shafranske[32] definition does not encompass reflection. The introduction of clinical supervision to nurses in the United Kingdom in 1993 had a large emphasis on the development of reflective practice within clinical supervision, and the definition utilising reflection set the standard for the development throughout nursing practice.[61] In this regard, whilst it has not been formally recognised as a key attribute within this project, it is likely to be inherent within all developed models.

To ameliorate the long distances between remote communities and lack of general practitioner onsite, the beta-LACTAM and Flags for Seeking Help models could be

applied in an intensive short period over 1–2 weeks within an urban primary health care setting; or a clinical supervisor could support the individual within the remote setting. In lieu of, or in addition to this model, the supervisee could attend clinical supervision sessions that are conducted over video conferencing systems or telephone on a regular basis. The case for telephone clinical supervision that was instituted via NHS direct for primary care nurses, practice nurses and NHS direct nurses was developed with a prompting question sheet on a database for time-poor nurses to fit into their busy schedule. Despite not being formally evaluated, the authors believed a sign of the system's success was that it was already being expanded across the United Kingdom.[48] The ability (or inability) to access high-speed telehealth services via Internet was not explored in this paper; however, this is an important consideration in regard to the practicalities of performing clinical supervision by distance, and further enquiry is required given the burgeoning availability of telehealth.[62]

This desktop review and analysis has proposed a model of clinical supervision that may suit isolated and generalist practitioners. Combining elements of clinical supervision models to the remote and generalist primary health care setting has resulted in a hybrid model as seen in Figure 2. The hybrid model recommends initial short courses for the supervisor and supervisee, a period of in-person supervision encompassing Flags for Seeking Help, beta-LACTAM and Trainee & Supervisor Reflection, Feedback & Debriefing Guides. When there is physical distance between supervisor and supervisees, the Kalymnos model could be utilised via video call with a group and Random Case Analysis could be performed via email, both conducted on a regular basis. The Flags for Seeking Help could be incorporated with the remote primary care manuals to formalise triggers for seeking support, and methods of communication could be via phone call, text messaging, video call or email. Finally, telephone support similar to the NHS Direct telephone service could be available to support individuals as required to reflect on practice and debrief. Using existing models from a range of primary health care professions is a strength of this study because the remote context also means that a model may not be profession-specific. The availability of other nurses may mean that the supervision relationship may be interdisciplinary or may include consumers for specific skills such as cultural safety or community engagement.

4.1 | Recommendations

A hybrid model of clinical supervision for RANs is proposed in Figure 2. This proposed new model needs validation and review by practitioners prior to pilot testing and evaluation. Whilst the focus of this study is nurses, we believe a clinical supervision model that is suitable for the isolated context could be used for other health practitioners such as medical and allied health and Aboriginal health practitioners.

4.2 | Limitations

There were several limitations to this scoping review. Grey literature such as industry policies and procedures, editorials and opinion pieces, and government and industry reports were excluded due to access limitations; however, they may have provided further examples of clinical supervision models that are currently in place. We anticipate that unpublished models of supervision may come to light during development and testing of the hybrid model with clinicians. Furthermore, like-for-like comparisons of the different clinical supervision models were not possible as some articles had more theoretical background and very little in the way of an explanation of the description of the model. Models were not evaluated in a similar way or were not evaluated at all, so the quality and effectiveness were not able to be assessed. In addition, not very many clinical supervision models demonstrated attributes such as instruction or assessment, which are vital to conducting clinical supervision with a 'hands on' competence perspective. Finally, and perhaps most significantly, there were no studies that provided guidance on supervision for culturally safe interactions.

5 | CONCLUSIONS

Whilst there are no identified clinical supervision models for nurses who work in remote primary health care settings, there are clinical supervision models developed for generalist health professionals in primary health care that could be further developed for remote or isolated practice nurses. It is recommended that a hybrid model of clinical supervision be validated, reviewed, tested and evaluated.

AUTHOR CONTRIBUTIONS

Fiona Hildebrand: Conceptualization; investigation; writing – original draft; methodology; visualization; writing – review and editing; formal analysis; project administration; data curation. **Michelle Gray:** Supervision; writing – review and editing; methodology. **Kylie McCullough:** Conceptualization; writing – review and editing; supervision; methodology.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

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ETHICS STATEMENT

An ethics application was submitted for the project, and it was deemed exempt from undergoing approval by the research ethics review (Edith Cowan University—03392). A data management plan was accepted by the university.

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REFERENCES

1. Geoscience Australia. Australia's size compared. 2023. Available from: https://www.ga.gov.au/scientific-topics/national-location-information/dimensions/australias-size-compared. Accessed 13 Mar 2023.
2. Australian Institute of Health and Welfare. Rural Remote Health. 2022.
3. Australian Institute of Health and Welfare. Profile of indigenous Australians. 2022.
4. World Health Organization. Increasing access to health workers in remote and rural areas through improved retention. 2010.
5. Wakerman J, Bourke L, Humphreys J, Taylor J. Is remote health different to rural health? Rural Remote Health. 2017;17:3832.
6. Birks M, Hegney D, Mills J. The status of rural nursing in Australia: 12 years on. Collegian. 2010;17(1):30–7.
7. McCullough K, Bayes S, Whitehead L, Williams A, Cope V. Nursing in a different world: remote area nursing as a specialist-generalist practice area. The. Aust J Rural Health. 2022;30:570–81.
8. CRANAplus. CRANAplus framework for remote and isolated practice. 2018. Available from: https://crana.org.au/cranaplus-framework-for-remote-and-isolated-practice. Accessed 15 Apr 2023.
9. Australian Government, Department of Health. Modified Monash model. 2019. Available from: https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm. Accessed 3 Feb 2023.
10. Francis KL, Mills JE. Sustaining and growing the rural nursing and midwifery workforce: understanding the issues and isolating directions for the future. Collegian. 2011;18(2):55–60.
11. Argent J, Lenthall S, Hines S, Rissel C. Perceptions of Australian remote area nurses about why they stay or leave: a qualitative study. J Nurs Manag. 2022;30:1243–51.
12. Bourke L, Humphreys JS, Wakerman J, Taylor J. From 'problem-describing' to 'problem-solving': challenging the 'deficit' view of remote and rural health. Aust J Rural Health. 2010;18(5):205–9.
13. Australian Primary Health Care Nurses Association. What is primary health care nursing? 2022. Available from: https://www.apna.asn.au/profession/what-is-primary-health-care-nursing. Accessed 23 Mar 2023.
14. World Health Organisation. Primary health care. 2023. Available from: https://www.who.int/health-topics/primary-health-care#tab=tab_1. Accessed 26 Mar 2023.
15. Speare T, Rissel C, Lenthall S, Pennington K. Evaluation of an online medicines' safety course for remote area nurses. Aust J Adv Nurs. 2021;38(4):24–31.
16. Pennington KR, Clark KD, Knight S. A bitter pill to swallow registered nurses and medicines regulation in remote Australia. Rural Remote Health. 2020;20(4):1–13.
17. Wood MP, Forsyth S, Dawson H. Remote area nurses' perceptions of the enablers and barriers for delivering end-of-life care in remote Australia to aboriginal people who choose to pass away on their traditional lands. Rural Remote Health. 2021;21(3):6485.
18. National Rural Health Alliance. Midwives in rural, regional and remote Australia. 2019. Available from: https://www.ruralhealth.org.au/sites/default/files/publications/fact-sheet-midwives.pdf. Accessed 7 Apr 2023.
19. Dossetor PJ, Thorburn K, Oscar J, Carter M, Fitzpatrick J, Bower C, et al. Review of aboriginal child health services in remote Western Australia identifies challenges and informs solutions. BMC Health Serv Res. 2019;19(1):758.
20. Heale R, Rieck Buckley C. An international perspective of advanced practice nursing regulation. Int Nurs Rev. 2015;62(3):421–9.
21. Nursing and Midwifery Board of Australia. Fact sheet: advanced nursing practice and specialty areas within nursing. 2020. Available from: https://www.nursingmidwiferyboard.gov.au/codes-guidelines-statements/faq/fact-sheet-advanced-nursing-practice-and-specialty-areas.aspx. Accessed 13 Apr 2023.
22. McCullough K, Bayes S, Whitehead L, Williams A, Cope V. We say we are doing primary health care but we're not: remote area nurses' perspectives on the challenges of providing primary health care services. Collegian. 2021;28(5):534–40.
23. Lenthall S, Wakerman J, Opie T, Dollard M, Dunn S, Knight S, et al. Original article: what stresses remote area nurses? Current knowledge and future action. Aust J Rural Health. 2009;17(4):208–13.
24. Opie T, Dollard M, Lenthall S, Wakerman J, Dunn S, Knight S, et al. Levels of occupational stress in the remote area nursing workforce. Aust J Rural Health. 2010;18(6):235–41.
25. Zhao Y, Russell DJ, Guthridge S, Ramjan M, Jones MP, Humphreys JS, et al. Cost impact of high staff turnover on primary care in remote Australia. Aust Health Rev. 2019;43(6):689–95.
26. Markey K, Murphy L, O'Donnell C, Turner J, Doody O. Clinical supervision: a panacea for missed care. J Nurs Manag. 2020;28(8):2113–7.
27. Australian College of Nursing. Position statement: clinical supervision for nurses and midwives [press release]. 2019.

28. Mills JE, Francis KL, Bonner A. Mentoring, clinical supervision and preceptoring: clarifying the conceptual definitions for Australian rural nurses. A review of the literature. Rural Remote Health. 2005;5(3):410.
29. Fowler J. Clinical supervision: from staff nurse to nurse consultant. Part 2: clarity of terms. Br J Nurs. 2013;22(14):848.
30. Scott C, Elliott M. Flipped clinical preceptorship: an alternate model of nursing student supervision. Teach Learn Nurs. 2019;14(1):43–6.
31. Olaolorunpo O. Mentoring in nursing: a concept analysis. Int J Caring Sci. 2019;12(1):142–8.
32. Falender CA, Shafranske EP. Clinical supervision: a competency-based approach. 2004.
33. Snowdon DA, Leggat SG, Taylor NF. Does clinical supervision of healthcare professionals improve effectiveness of care and patient experience? A systematic review. BMC Health Serv Res. 2017;17(1):786.
34. Reynolds J, Mortimore G. Clinical supervision for advanced practitioners. Br J Nurs. 2021;30(7):422–4.
35. Thomas M. Vicarious trauma and nursing: an integrative review. Int J Ment Health Nurs. 2022;31(2):247–59.
36. McCullough K, Whitehead L, Bayes S, Williams A, Cope V. The delivery of primary health care in remote communities: a grounded theory study of the perspective of nurses. Int J Nurs Stud. 2020;102:103474.
37. Office of the National Rural Health Commissioner. The national rural and remote nursing generalist framework 2023–2027. 2023.
38. Brunero S, Stein-Parbury J. The effectiveness of clinical supervision in nursing: an evidenced based literature review. Aust J Adv Nurs. 2008;25(3):86–94.
39. Wright LK, Jatrana S, Lindsay D. Workforce safety in the remote health sector of Australia: a scoping review. BMJ Open. 2021;11(8):e051345.
40. Munn Z, Peters MDJ, Stern C, Tufanaru C, McArthur A, Aromataris E. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC Med Res Methodol. 2018;18(1):143.
41. Bradbury-Jones C, Aveyard H, Herber OR, Isham L, Taylor J, O'Malley L. Scoping reviews: the PAGER framework for improving the quality of reporting. Int J Soc Res Methodol. 2022;25(4):457–70.
42. Butler A, Hall H, Copnell B. A guide to writing a qualitative systematic review protocol to enhance evidence-based practice in nursing and health care. Worldviews Evid Based Nurs. 2016;13(3):241–9.
43. Shemilt I, Khan N, Park S, Thomas J. Use of cost-effectiveness analysis to compare the efficiency of study identification methods in systematic reviews. Syst Rev. 2016;5(1):140.
44. National Health and Medical Research Council. National statement on ethical conduct in human research (2007) – updated 2018. 2018.
45. Sullivan-Bolyai SL, Bova CA. Qualitative description: a "how-to" guide. 2021. Available from: https://escholarship.umassmed.edu/publications/53/. Accessed 3 May 2023.
46. Sandelowski M. What's in a name? Qualitative description revisited. Res Nurs Health. 2010;33(1):77.
47. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101.
48. Thompson S, Winter R. A telephone-led clinical supervision pilot for nurses in different settings. Prof Nurse. 2003;18(8):467–70.
49. Alleyne JO, Jumaa MO. Building the capacity for evidence-based clinical nursing leadership: the role of executive co-coaching and group clinical supervision for quality patient services. J Nurs Manag. 2007;15(2):230–43.
50. Cheater FM, Hale C. An evaluation of a local clinical supervision scheme for practice nurses. J Clin Nurs. 2001;10(1):119–31.
51. Cutcliffe J, McFeely S. Practice nurses and their 'lived experience' of clinical supervision. Br J Nurs. 2001;10(5):312–4.
52. Cabot K, Estreich L. Setting up a supervision skills group in primary care. Educ Prim Care. 2012;23(5):357–9.
53. Morgan S, Ingham G, Kinsman L, Fry J. Clinical supervision using random case analysis in general practice training. Educ Prim Care. 2015;26(1):40–6.
54. Sturman N, Fitzmaurice L, Ingham G, Lee C, Sheldrake M. Getting good help: a guide for reflection, debriefing and feedback conversations about in-consultation supervision. Educ Prim Care. 2021;32(2):118–22.
55. Nielsen HG, Davidsen AS. Witnesses in the consultation room – experiences of peer group supervision. Educ Prim Care. 2017;28(5):258–64.
56. Jukes M, Millard J, Chessum C. Nurse prescribing: a case for clinical supervision. Br J Community Nurs. 2004;9(7):291–7.
57. Sturman N, Fitzmaurice L, Lee C, Sheldrake M, Ingham G. Flags for seeking help: making supervisor expectations of general practice trainee help-seeking explicit. Educ Prim Care. 2021;32(2):109–17.
58. Sturman N, Fitzmaurice L, Lee C, Sheldrake M, Ingham G. Good help: a model for providing in-consultation supervision of general practice trainees. Educ Prim Care. 2021;32(2):104–8.
59. Jones JA, Reeve CA. Factors influencing the use of clinical guidelines by general practitioners working in a setting of complex multimorbidity: a case study by interviews. BMC Fam Pract. 2018;19(1):1–10.
60. Nursing and Midwifery Board of Australia. Registered nurse standards for practice. 2016.
61. Masamha R, Alfred L, Harris R, Bassett S, Burden S, Gilmore A. 'Barriers to overcoming the barriers': a scoping review exploring 30 years of clinical supervision literature. J Adv Nurs. 2022;78(9):2678–92.
62. Department of Health and Aged Care. Telehealth hits 100 million services milestone [press release]. 2022.

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