

REVIEW ARTICLE


What do nurses practising in rural, remote and isolated locations consider important for attraction and retention? A scoping review

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ABSTRACT:

Introduction: Nurses play a vital role in the provision of health care in rural, remote and isolated locations. Consequently, the current global nursing workforce shortage has significant and far-ranging implications for these communities where there are enduring issues with workforce maldistribution and shortage, instability, high staff turnover and health disparities. This article provides an analysis of existing literature on what rural, remote and isolated practising nurses view as important for the attraction and retention of this workforce in the Australian context.

Methods: A structured scoping review informed by Arksey and O'Malley's framework for conducting scoping studies was undertaken. Six electronic databases were searched in August 2022. Cosgrave's person-centred retention improvement

framework (which includes attraction) for addressing health workforce challenges in rural contexts was used to guide the synthesis and interpretation of information from the included studies. Key themes were identified inductively, conceptualised within Cosgrave's framework and mapped to the overarching lifecycle stages of attraction, retention and resignation, also referred to as turnover or decision to leave.

Results: Twelve articles met the inclusion criteria for this review. Six themes related to attraction, retention and resignation were identified: (1) demanding role and scope of practice; (2) values divergence and professional opportunities; (3) continuing professional development and mentoring; (4) social, lifestyle and personal or family; (5) management and organisation; and (6) pay

and incentives. The issues articulated within each of these themes overlapped, highlighting the complexities involved.

Conclusion: Limited empirical research that combines a person-centred and whole-of-lifecycle approach to understanding the rural and remote nursing workforce was found. However, our analysis of existing evidence suggests that such approaches are

Keywords:

attraction, Australia, isolated nursing, motivations, nursing workforce, recruitment, resignation, retention, rural nursing, remote nursing, turnover.

FULL ARTICLE:

Introduction

In its most recent report on the nursing workforce, the WHO estimated that an additional nine million nurses and midwives will be needed by 2030 to meet global healthcare needs¹. As a professional group, nurses represent almost half of the worldwide health workforce and play a critical role in providing health care, from tertiary through to primary and community-based settings². The lack of an adequately sized nursing workforce thus has fundamental consequences for the accessibility and quality of health care provided to communities^{1,2}. It also detrimentally affects the health and wellbeing of the existing nursing workforce and damages community perceptions of health services, further exacerbating attrition, and the acceptability and utilisation of health services^{1,3}.

In the rural health workforce, which in this context refers to practitioners practising outside of metropolitan and regional centres, nurses are described as the backbone of the healthcare system and may be the only health professionals from whom care and treatment can be received⁴⁻⁹. This is certainly the case in remote and isolated locations in Australia. In these locations, nurses constitute the single largest cohort of healthcare professionals⁴⁻⁹ and provide care models for local residents to address a range of health issues across the lifecourse¹⁰. The current global nursing workforce shortage, driven by a decline in enrolments and at the same time as increasing demand from an ageing population^{1,11}, has significant and far-ranging implications for rural, remote and isolated communities. This is in the context of enduring issues for rural, remote and isolated places, with workforce maldistribution caused by workforce shortages and high staff turnover contributing to health disparities¹².

Many of the factors contributing to attrition and turnover within the nursing workforce – the decision to leave a position^{13,14} – are relevant to all practice contexts. However, rural and remote nursing is widely recognised as a complex and unique profession with a broad scope of practice^{7,9,15-19}. Further, there are increased rates of burnout in these locations compared to larger regional or metropolitan centres. The higher numbers of fly-in fly-out (FIFO) workers in these contexts can contribute to this issue given that the work of orientating and training FIFO workers, who routinely rotate through different places, is often assigned to the few permanent in-place staff^{8,12,15,20-22}. Consequently, some issues pertaining to the attraction and retention of nurses in rural, remote and isolated practice contexts are unique^{4,5,9,20,23-26}. In Australia, governments have invested in developing strategies aimed at strengthening the rural and remote nursing workforce^{19,27-35}, which have made some, though not substantial, progress^{4,5}. A key gap in current understanding and strategic action is the limited

required to appropriately plan for and target solutions that centre nurses' specific needs and experiences for the future nursing workforce. Relatedly, limited translational research on the nursing workforce that explicitly includes and engages with nurses was found. Such research is fundamentally needed to improve retention outcomes.

investigation into what nurses currently practising in rural, remote and isolated locations view as important for improving the attraction and retention of their workforce and reducing avoidable resignation (also referred to as avoidable turnover, turnover intention and decision to leave)¹⁴. These perspectives are vital to informing the development of an integrated person-centred and whole-of-lifecycle approach to improving the attraction and retention of the rural and remote nursing workforce.

The purpose of this article is to present an analysis of existing literature that reports rural and remote nurses' views on what informs the attraction, retention and resignation of this workforce. This includes examining how the motivations and values underpinning the views and experiences of nurses in rural, remote and isolated settings have been considered in the field to date. In doing so, we hope to provide researchers, rural and remote health service managers and policymakers with useful guidance on future actions that respond to the issues identified by nurses in these contexts.

Methods

A structured scoping review was undertaken to identify current knowledge, from a nursing perspective, about the attraction, retention and resignation decisions of nurses in the rural and remote workforce in Australia and explore gaps in the available literature. The review process was informed by Arksey and O'Malley's framework for conducting scoping studies³⁶, which specifies five stages that enable a consistent approach, from formulating an appropriate question to summarising and reporting findings. In addition to Arksey and O'Malley's scoping studies framework³⁶, discrete chapters from Boland, Cherry and Dickson's text on undertaking systematic reviews and Liamputtong's work on research methods and evidence-based practice informed the approach taken to the organisation and synthesis of data and the review of qualitative evidence³⁷⁻⁴¹. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis Extension for Scoping Reviews (PRISMA-ScR) checklist was also used to guide the reporting in this review⁴².

Identifying the research question

The initial research question guiding this review was informed by the first author's prior knowledge and experience as a practising remote area nurse (predominantly within the state of Queensland) and conversations with other nurses in the remote workforce. Some preliminary literature scans were conducted in April 2022 to gain a sense of current scholarship and assess the availability of sources to address this area of inquiry. These initial literature scans identified a need for a greater understanding of attraction, retention and resignation within the remote nursing workforce

from the perspectives of nurses practising in these contexts. Drawing on this indicative search of extant literature, the research question guiding the current review was refined to 'What are the perceptions, values and motivations of nurses practising in rural, remote and isolated settings of Australia about attraction, retention and resignation within their own workforce?' The decision was made to include rural as well as remote and isolated settings to account for particularities and similarities between these practice environments and ensure potentially pertinent literature was not overlooked.

Identifying relevant studies

A comprehensive list of search terms (Appendix I) was generated to identify relevant studies, informed by the preliminary literature scans referenced earlier. A series of inclusive search strings (Table 1) was then developed and trialled from these terms, with the assistance of a highly experienced specialist librarian, whose advice was also sought to select appropriate databases to search. Here, consideration was given to the nature of the content expected and the reputation as relevant and reliable databases. Six databases were selected: CINAHL, PubMed, Embase, Medline, Scopus and Cochrane Library. Each database was then searched in August 2022 using the refined search strings, adjusted to account for database-specific variations.

Study selection

The searches deployed across the selected databases yielded 714 results. Given the similarity and number of search results between PubMed and Medline, the results from Medline were excluded. Results from the Cochrane Library were also excluded, as none were relevant to nurses' perspectives, values or motivations. Results were scanned for duplication, and all duplicates were removed ($n=421$). The titles and abstracts of all other identified studies were then screened by the first author using predetermined inclusion and exclusion criteria (specified in Table 1). Here, it is emphasised that only studies detailing the values, perceptions and motivations of nurses practising in rural, remote or isolated locations, based on data collected directly from nurses working in these contexts, were included. Where the first author could not make a clear include/exclude decision, the second author independently reviewed the title and abstract to make this decision, which was discussed and confirmed with the first author. When neither the first nor second author could make a definitive decision, the third author also reviewed and a decision was made through discussion. Following this process, the full texts of all remaining studies ($n=50$) were reviewed to confirm the final selection of included studies, of which there were 12. Figure 1 outlines the number of articles reviewed and excluded at different stages in the process. Throughout this screening and subsequent stages of the review, the research question was revisited by all authors, who worked collaboratively to ensure decisions were made with reference to this question.

Table 1: Study inclusion and exclusion criteria

Inclusion	Exclusion
Nursing cohort included within study	Any solely medical, allied health or non-nursing cohort-based research
Qualitative, mixed-methods and systematic reviews	Clinical trials, grey literature
Setting within rural, remote or isolated regions	Metropolitan focus
Nurses' values, perceptions, or motivations discussed	Where values and perceptions were not discussed
May include values and perceptions of other cohorts [health workers, allied health, medical or management]	Includes values and perceptions solely of medical, allied health or other workforces
Australian-based research focus	All non-Australian-focused research
Published between 2012 and time of review (2022)	Any works published prior to 2012
	Opinion pieces, editorials or letters to the editor
English language	Non-English language

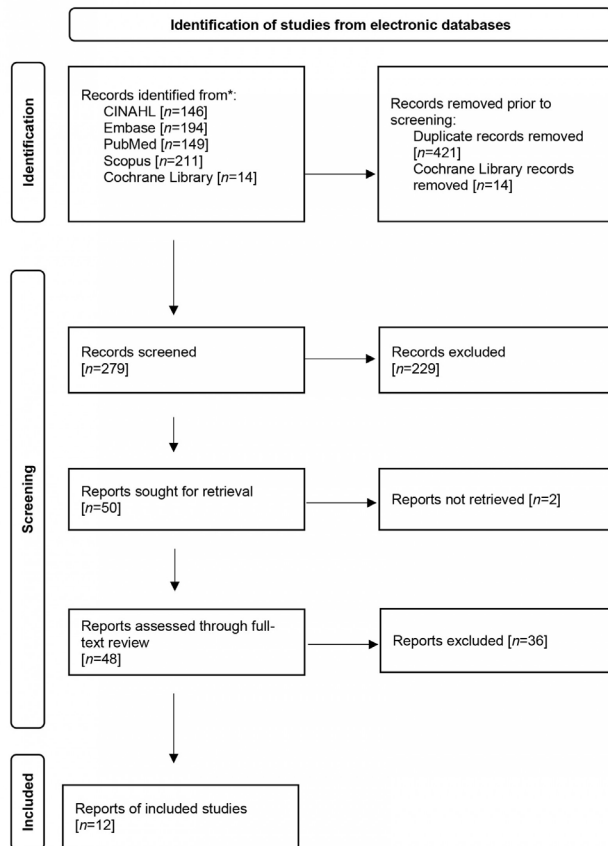


Figure 1: PRISMA 2020 flow diagram.

Charting the data

The key methodological details, including the setting or location of the research, its aim, methods employed and sample, were extracted and charted along with findings pertinent to the research

question guiding the review from each included article (Table 2). This provided a contextualising and accessible summary of the reviewed research. From this foundational synthesis, a deeper analysis was built.

Table 2: Methodological details and relevant findings in reviewed literature^{14,43-53}

Author, year (ref.)	Setting/location	Aim	Methods	Sample
Morell et al 2014 (ref. 43)	Remote workforce agencies participating in the program	Review and report results of the Rural Health Professionals Program	Monthly interviews and questionnaires over 13 months	349 nurses, physiotherapists, dentists, social workers, occupational therapists, pharmacists, psychologists, dietitians, podiatrists and other healthcare professionals
Ostini and Bonner 2012 (ref. 44)	Rural acute care facility in New South Wales	How orientation and supports can assist in the transition for students becoming registered nurses in rural/regional settings	Interviews	5 new graduate nurses
Jones et al 2019 (ref. 45)	International remote settings (including Australia)	Providing deeper understanding of barriers to attraction and retention in rural areas	Qualitative meta-analysis	Nil participants. 12 qualitative articles
Bragg and Bonner 2014 (ref. 46)	Various rural hospitals across New South Wales	Gain understanding as to why nurses resign and provide theory for developing retention advice for workforce planning/planners	Semi-structured interviews	12 nurses from various settings and hospitals who had resigned
Heidelbeer and Carson 2013 (ref. 47)	Remote Northern Territory	Investigate the experiences of non-resident nurses in a specific region	Semi-structured interviews	7 nurses (self-selected)
Kagi E et al 2022 (ref. 48)	Remote Western Australia PHC	Exploring the experiences of PHC nurses in Western Australia in relation to career advancement and continuing professional development	In-depth, semi-structured and face-to-face interviews	6 registered nurses
Cosgrave et al 2018 (ref. 14)	Rural New South Wales	Identify life factors that affect workers turnover intention	In-depth, semi-structured interviews	26 nurses and allied health professionals
Warburton et al 2014 (ref. 49)	Rural Victoria	Addressing gaps in research relating to retention of older healthcare workers	Mixed-methods study: stage 1, qualitative participants; stage 2, recorded and de-identified interviews	299 participants in stage 1 and 17 nurses and allied health professionals in stage 2
Bragg and Bonner 2015 (ref. 50)	Rural New South Wales	Exploration of why nurses resign from rural hospitals and explores resignation period	Open-ended question interviews lasting 50–120 minutes	12 registered nurses
Argent et al 2022 (ref. 51)	Australia-wide	Explore how remote area nurses perceive nursing staff retention strategies	Semi-structured telephone interviews	7 registered nurses who had worked or were working in very remote (Monash Model 7) locations
Whiteing et al 2022 (ref. 52)	New South Wales and Queensland	Differentiate contemporary practice of registered nurses working in rural and remote areas of Australia	Three-phase data collection and review: stage 1, document review; stage 2, online questionnaire; stage 3 – semi-structured interviews	Stage 1, 42 documents; stage 2, 75 registered nurses; stage 3, 20 registered nurses
Yates et al 2013 (ref. 53)	Far North Queensland	Explore the role and experiences and midwives working as dual role midwife and nurse within rural areas	Conversational in-person interviews using open-ended questioning	8 dual registered midwives/registered nurses

PHC, primary health care.

Collating, summarising and reporting the results

Cosgrave’s person-centred retention improvement framework¹², which includes attraction and recruitment, for addressing health workforce challenges in rural contexts, was used to aid in synthesising and interpreting information from the included studies. This framework provided a clear structure in which the specific themes related to attraction, retention and resignation that were identified in the included studies could be located and

considered. It also enabled the interconnected nature of the issues articulated in these themes to be conceptualised in a nuanced manner. Information from the studies pertinent to each of Cosgrave’s domains¹² was analysed and collated thematically, first reviewing the studies and then creating appropriate codes relevant to each⁵⁴. Candidate themes were then refined to elucidate issues specific to different lifecycle stages. The identified themes are mapped to the lifecycle stages of attraction–retention–resignation in Table 3.

Table 3: Themes relevant to the three lifecycle stages^{14,43-53}

Theme	Description of theme	Lifecycle stage	Reference numbers
Demanding role and scope of practice (11/12)	Role is extremely varied, has high demands and regularly has broad scope of practice compared to other non-remote settings.	Attraction	43, 44, 45, 53
		Retention	14, 44, 45, 47, 48, 49, 51, 52, 53
		Resignation	14, 46, 48, 49, 51, 52
Values divergence and professional opportunities (11/12)	Individuals want to progress or feeling there are opportunities to do so. Additionally, individuals' values and feelings that their values are conflicting to those of the organisation or do not align with the role.	Attraction	43, 44, 53
		Retention	14, 44, 47, 48, 49, 51, 52, 53
		Resignation	14, 46, 48, 49, 50, 51, 52
CPD and mentoring (7/12)	CPD and mentoring relates to the initial and ongoing training, development and support of individuals. This is most commonly referred to as mandatory training requirements; however, it also includes supports of senior staff, additional training opportunities or educational allowances of time or resources.	Attraction	43, 44, 45
		Retention	14, 45, 47, 48, 52
		Resignation	14, 45, 48
Social, lifestyle and personal/family (6/12)	Social, lifestyle and personal factors were highlighted in many results. This theme is primarily any factors that are personal rather than professional in nature (as all other themes are aspects of professional issues).	Attraction	14, 43, 44
		Retention	44, 45, 47, 49, 51
		Resignation	45, 49, 51
Management and organisation (5/12)	Generally, management and organisation are discussed in relation to support, assisting individuals or understanding individuals. Management and organisation are discussed as both positive and negative impacting factors in relation to recruitment, retention and resignation.	Attraction	45
		Retention	45, 49, 50, 51
		Resignation	46, 49, 50, 51
Pay and incentives (3/12)	The pay and incentives relate specifically to financial or other benefits received, or offered, directly linked to the location or role of remote nursing. Pay and incentives did not take into account the standard nursing salaries, overtime penalties or state-specific awards.	Attraction	43
		Retention	49, 51
		Resignation	49

CPD, continuing professional development.

Ethics approval

This scoping review used only peer-reviewed, published data, so it did not require ethics review or approval.

Results

Twelve articles met the inclusion criteria of this review; Table 2 provides a summary of each article. A range of research methodologies, including qualitative, scoping and other reviews, as well as mixed-methods, were utilised in these included articles, which provided different forms of evidence and insight into nurses' perceptions, values and motivations pertaining to the attraction, retention and resignation of their workforce. Six themes were identified and labelled:

- demanding role and scope of practice
- values divergence and professional opportunities
- continuing professional development (CPD) and mentoring
- social, lifestyle and personal/family
- management and organisation
- pay and incentives.

The findings of each of the included articles contributed to the development of these six themes (Table 3), which provides confidence in the interpretation of sources⁵⁵. These six identified themes were then conceptualised within Cosgrave's framework¹² and the overarching lifecycle stages of attraction, retention and resignation. The complex way these themes overlap and interconnect is discussed below. The numbers presented in brackets after the name of each theme indicate the number of articles in which the specified theme was identified.

Demanding role and scope of practice (11/12)

The roles' demands, pressures and uniqueness were described as factors that either drew nurses to rural, remote or isolated settings or led them to leave these practice environments^{14,43,45,47-49,52}. Nurses who reported being drawn to and remaining in rural, remote or isolated settings tended to discuss the overwhelming professional satisfaction derived from their work. While this led to retention in the medium term, it was also described as a complicating factor for many when the decision was made to

leave; these nurses reported a sense of failure if the role became too much or other circumstances required them to move away^{52,53}.

Relatedly, the scope of practice was specifically identified as a factor informing intent to stay. Nurses reported experiencing tension when the scope of practice, expectations of colleagues or superiors, or safety concerns did not align with their professional values or understood boundaries within their roles^{44,46-48,52}. Unclear job description(s) or scope of practice was viewed as a barrier to attraction and a tension for retention. As explained in more detail in the final theme presented, the scope of practice and delineation of roles were also linked to pay and incentives in relation to retention or resignation^{47,48}.

Burnout, characterised by 'emotional exhaustion, depersonalisation, cynicism, detachment and a low sense of personal accomplishment'⁵⁶, was regularly discussed by nurses in the context of the demands of the role. To manage burnout specifically, it was reported that some rural and remote health services put in place flexible work arrangements, or individuals undertook the work as full-time or contractor staff that allowed time to relieve related work stressors^{49,51,53}. One such example was individuals working for 3–6 weeks before taking time off or travelling back to their home location⁵⁴. However, in these cases it was noted that flexible arrangements were often insufficient to reduce burnout or were not implemented in partnership with the nurses involved^{47,49}. Therefore, it was unsurprising that all participants in one article listed workload pressures as the reason to either consider or follow through with resignation⁴⁹. These workload pressures ranged from feeling that shift and on-call requirements were no longer manageable to being ill-equipped or underprepared for the role, the expectations of patients, community or higher management, or being overwhelmed or burnt out from the work⁴⁹.

Values divergence and professional opportunities (11/12)

Professional opportunities in rural, remote and isolated environments, which were frequently tied to the notion of professional pride, were identified as important factors for attraction and retention^{14,43,44,47-53}. Many available nursing positions in the rural and remote workforce allow for speedy

advancement as a junior clinician. Variation of positions and opportunity to undertake 'multi-hatted' roles that would not be considered standard practice in metropolitan settings are more likely in rural, remote or isolated practice settings. These opportunities for advancement and role experience were highly valued, especially among junior to mid-career nurses, and were a motivating factor in choosing a rural, remote or isolated practice environment over metropolitan or larger regional contexts^{43,44,47,48,51,53}. In contrast, nurses who had either practised for some time or previously occupied senior roles expressed frustration and disillusionment with the lack of career progression past a certain point in these practice environments and experienced great difficulty with professional isolation^{14,46-50,53}. This led to a sense of disconnection from their wider nursing cohort, and motivations to stay in the role diminished over time.

Several of the included articles explored the concept of value divergence, where an individual's professional values do not align with hospital values^{14,46,47,49}. In such circumstances, nurses reported feeling unable to perform their roles safely, and pressured to perform uncomfortable tasks that were pushing the legal boundaries of the scope of practice – a combination of training, education, legal authority and individual skill level. Specific examples of value divergence reported in the included articles were finances being more important than patient care, timeframes placed on care in lieu of comprehensive or quality care and attention, or pressure to perform patient care in a way that was compromising⁴⁶. These experiences and the broader theme to which they have been assigned here link to the theme of scope of practice discussed earlier and to effective workplace supports.

Continuing professional development and mentoring (7/12)

The importance placed on CPD and mentoring in the context of attraction, retention or resignation was significant in seven of the included studies^{14,43-45,47,48,52}. Training provisions were regularly highlighted as a significant driving factor for nurses when seeking out or continuing in a rural or remote role^{14,44,45}. When nurses perceived that there were opportunities for professional development, training and growth, it most often had a positive impact on attraction to and retention in a rural or remote role^{43-45,48}. Conversely, there was a strong link between resignation or intent to leave and a lack of support for CPD, which included the expectation that nurses needed to make their own arrangements for training outside of an already-demanding role⁴⁵.

Many nurses in the included studies explained that there were times when even mandatory training, such as yearly clinical competency training – required by their employer – could not be attended due to work demands, had to be done in nurses' own time, or was paid directly out of nurses' own pockets to enable attendance at courses provided externally because it was the only way participation in the training could be facilitated in a timely manner^{45,47,48}. In interview studies, nurses clearly articulated how the difficulties involved in undertaking CPD caused exhaustion and made them feel degraded and, ultimately, unsupported in their roles. This theme strongly correlated with that of management and organisation – discussed below – with many nurses expressing that, while their management was largely approachable when it came to needing support or resourcing for CPD and training, there was little to no input or backing^{14,45,48}. In this context, nurses highlighted the importance of managerial and organisational support of CPD, both for the value of training itself and as a clear

illustration to nurse employees that they are valued.

The concept of mentoring was closely linked to professional development in terms of organisational and management support. This included individual development, organisational facilitation of training, senior clinical mentoring and physical training^{43-45,48,52}. Nurses in the included studies discussed the importance of having a 'buddy' system in the early stages of working in rural, remote or isolated settings. They suggested that retention would improve if ongoing mentoring, peer supports and professional mentors were facilitated or encouraged by organisations and management^{44,48,52}. One of the included articles focused specifically on the experiences of new graduate nurses and found that junior clinicians were highly impacted, positively and negatively, by their experiences with senior support staff, clinical training, professional development, advancement opportunities and mentoring partnerships⁴⁴. Participants in this study represented a good cross-section of junior clinicians in similar circumstances. The impact on attraction, retention and resignation highlighted, in this instance, that those who felt unsupported were more likely to have intentions of leaving, while those with positive experiences of mentoring and support for CPD intended to stay.

Social, lifestyle and personal/family (6/12)

Many nurses and healthcare professionals view rural, remote or isolated work in a romanticised and idyllic light, and some nurses consider moving to these areas for such reasons^{44,45,49,51}. While lifestyle, social, family or personal factors did not appear to be the sole reason for deciding to stay in or leave a rural or remote position, nurses in the included studies were often motivated by such factors. Along with organisational 'fit' and a desire for professional development, nurses in the included studies regularly referenced a sense of belonging to place, personal and cultural exploration, cultural understanding, socialisation, or travel and adventure as important considerations for working in a rural, remote or isolated setting^{43,45,47}. In some of the included articles, lifestyle and personal factors, including lack of supports, services, or activities for families, featured in nurses' decisions about where to practice across the lifecycle^{45,47}. Alternatively, there was a common sense that working in small communities demands a constant work persona, which leaves little time to rest and reset between shifts or to socialise with other community members as friends rather than patients^{45,49}.

In considering lifestyle, nurses in the included studies often raised family and social factors as the main drivers for considering a position in rural, remote or isolated locations. For example, some nurses considered a FIFO role preferable for lifestyle as they could be fully 'at work' while remote and fully present at home outside of work^{47,49}. Others, however, discussed the difficulties of being away from home for extended periods while working as a FIFO nurse, including missing special occasions or having a messy or unpredictable routine^{49,51}. Here, it was expressed that they could not truly have the remote lifestyle unless living in the area, but the toll this lifestyle can take on family and other relationships was described⁵¹. Both permanent and FIFO nurses noted that the opportunity to be in and engage with many rural, remote or isolated communities was a positive and unique benefit to the work; in some instances, there would be no other opportunity to gain familiarity with certain communities and places^{47,49,51}. Given the distance to previous home location, immediate or extended family, general geographic isolation and complications these

issues cause to personal lives, many nurses reported not having the ongoing motivation to remain in rural, remote or isolated settings, even when they were professionally satisfied^{49,51}.

Management and organisation (5/12)

Although not unique to nursing or to rural, remote and isolated settings, the impact of management and organisational factors on staff attraction, retention and resignation rates was raised in several of the included articles^{20,25,27,32,45,46,49-51,57,58}. Feeling valued and supported by management and the organisation was identified as important to the professional satisfaction of many nurses in the included studies^{45,46,49,50}. This theme was found to resonate strongly in the retention and resignation stages of the lifecycle^{45,49,50,52}.

Nurses who felt valued had a greater propensity to take a role or entertain a position in a rural, remote or isolated place⁴⁵. Similarly, some nurses in the included studies explained that their resignation, or intent to resign, was a direct result of management or perceived lack of organisational valuing^{45,46,49-51}. These studies highlight how both retention and resignation intent are strongly linked to and impacted by management style, leadership and how organisations value (or not) their nursing staff. When considering if they would stay in a role, nurses in the included studies cited perceptions of how they were valued within their organisation's multiple times^{46,49-51}. For instance, nurses who felt that an organisation valued their experience and backed them in all circumstances were more likely to remain in their position longer⁴⁹⁻⁵¹. The opposite was also true: when nurses felt that their organisation was not supporting them, or that their values were compromised or no longer in alignment with those of the organisation, there was no other option but to leave the role, despite having a desire to stay for their patients or the community⁵⁰.

Pay and incentives (3/12)

Pay and incentives were cited as factors impacting nurses' motivations for taking up rural or remote positions. However, it was the least prevalent and expanded-upon theme identified across the included studies^{43,49,51}. Overarchingly, discussions pertaining to pay and incentives related to how individual nurses understand remote work as more highly remunerated than metropolitan-based work⁴³. Yet nurses in the included studies who had been working in rural, remote or isolated places for a longer period did not always consider the higher wage adequate, given the level of responsibility within the role⁴⁹. For example, in two of the included studies, nurses who expressed feeling their organisations did not value them in the remote setting specified that this was, in part, illustrated by inappropriate compensation, incentive packages, monetary supports and a lack of other benefits^{49,51}. For these nurses, the ongoing experience and skill of remote nurses are not systemically recognised.

One study discussed a program designed to recruit nursing, dental and allied health professionals into rural and remote work⁴³. One of the factors specified as impacting the decisions of health professionals in this study was that of pay and incentives: this was listed as one of the primary factors for participants (including nurses) considering involvement in the program, with 51% of participants identifying this as their reason for participation⁴³. In another article, the importance of financial stability and preparing for retirement in the stay/go decisions of nurses was highlighted,

although not discussed or explored in detail⁴⁹.

Discussion

This review provides a comprehensive overview, from an Australian perspective, of what underpins the attraction, retention and resignation of nurses in rural, remote and isolated settings from the perspectives of nurses practising in these environments. In undertaking this review, several clear gaps in existing literature were identified. For example, limited empirical research has adopted a whole-of-person combined with whole-of-lifecycle approach to understanding the rural and remote nursing workforce; the evidence produced through such approaches is required to appropriately plan for and target solutions for the future nursing workforce. This is especially the case in the context of ongoing and chronic nursing shortages, which are also occurring internationally. The lack of such research in the present context indicates that translational research on the nursing workforce that explicitly includes and engages with nurses is fundamentally needed. The implications of this review's findings for rural and remote workforce development, health service and policy planning – issues of key concern for health departments globally – warrant further investigation to allow nurses to provide high-level care in a supportive environment with appropriate personnel on the ground.

In contrast to equivalent metropolitan-based nursing positions, for which there are most often clear role descriptions, supports, pathways and training programs, this review underscored a lack of understanding at a broader level around available supports, transition programs, the scope of practice boundaries, or personal capability required in rural or remote positions. In considering the matter of attraction, this review's findings emphasise the importance of:

- exposure to rural, remote and isolated places as part of undergraduate and post-graduate training^{26,28,34,59-61}
- clear scope of roles and expectations for rural and remote-based roles^{16,34,47,52,62}
- pre-requisite pre-commencement training, including remote specialisation, cultural and local area awareness and scope of practice familiarisation^{26,47,52}
- training and development of local rural and remote nurses to work in their own communities (including Indigenous programs)^{19,34,62}.

These four strategies would better enable the attraction of nurses who are a good fit for the role, enhance intent to stay longer term, and improve the overall stability of the health workforce in rural, remote and isolated communities. Given that attracting a rural health workforce is a global challenge⁶², there is merit in exploring the applicability of these strategies in other international contexts.

While not easily decoupled from attraction, most of the included studies focused on factors affecting retention. In considering the findings of this review through a retention lens, several short- and long-term strategies deployed at the organisational level can be recommended, which again are likely to have relevance to other rural places in the world where the retention of nursing staff is a challenge. In the short term, these include instigating a systematic process of proactively seeking feedback from nurses throughout their tenure^{50,57} and providing nurses with a clear and accessible path to discuss concerns with management or key organisational leads. For long-term impact, eight strategic actions can be

recommended based on the findings of this review:

- Introduce (or improve) hospital and health service induction and social orientation packages into the organisation and the community for new-to-place staff⁶³.
- Introduce skill- and experience-based pay and incentives to link incentives to longer-term contracts and role demands^{20,22,64-67}.
- Develop a rural and remote nursing progression program to cultivate and enable professional growth across the full career span.
- Introduce additional supports for CPD beyond mandatory training and leave types associated with participation in this training¹⁸.
- Develop relevant training packages, co-designed with nurses, based on local and individual needs^{9,16}.
- Implement strict fatigue management and leave protocols to reduce burnout and intent to leave (ie no on-call past a set number of hours, and leave must be taken every set number of days/months).
- Develop a systems-supported mechanism for finding appropriate replacement staff for leave periods to lessen the pressure on rural and remote nurses to return to work hurriedly^{19,20,68}.
- Establish a well-planned mentoring and peer support program for new and experienced rural and remote nurses (buddying up new arrivals with experienced team members) to ensure that nurses across the career spectrum have colleagues to bounce ideas off and feel heard and supported in their roles.

Improving the attraction and retention of nurses in rural, remote and isolated practice environments will reduce the need to focus on resignation within this workforce. However, this review's findings suggest several actions that could be taken at an organisational level to ensure continued improvement and future support to the nursing pipeline. This includes the following actions:

- Establish a process for capturing data on staff's job and personal satisfaction before resignation to better enable proactive actions⁶⁹.
- Instigate routine exit interviews with resigning nursing staff to examine reasons for resignation, experiences of the organisation, and suggestions for improvement with clear systems for this de-identified data to be reported in thematic form to line managers and executive staff⁵⁰.
- Review of vacant position scope of practice, role descriptions and needs of health services for appropriate nurses for the incoming position, applying a person-fit-environment recruitment process to support recruiting suitable candidates for job and community¹².
- Develop a process for providing exiting staff with the opportunity to use their skills and experience to support future staff (ie mentoring, training, teaching or peer support)^{15,68}.

Limitations

This scoping review intentionally focused on Australian studies, which, while putting a constraint on the results, enabled a specific, place-conscious research aim to be addressed. In acknowledging this place focus, it is also important to highlight that, increasingly, stronger similarities in context and experience are being found between rural places in different parts of the world than between rural places and metropolitan centres within the same national boundaries⁷⁰. This suggests the review's findings have value and relevance beyond Australia.

The review was limited to the views of nurses rather than health professionals more broadly or community members and other key stakeholders. It was also outside the scope of this review to explore how the specific issues pertaining to attraction, retention and resignation identified by nursing staff impact patient outcomes, health service demands or patient satisfaction, but this is valuable research to pursue in future work. Lastly, the scoping review methodology does not incorporate an evaluation of the quality, scope or level of evidence in included studies. However, opinion or editorial pieces were excluded from this review.

Conclusion

This scoping review provides insights into the perspectives and concerns of nurses practising in rural, remote and isolated settings in Australia, focusing on issues affecting their workforce based on 10 years of past research. The results of this review suggest that there would be significant advantages to a considered, holistic, lifecycle-stage-focused approach to attraction, retention and resignation within the rural and remote nursing workforce. This will likely continue to be a key topic of discussion in the context of overall nursing workforce shortages and the considerably unique position and scope of available remote and isolated work in particular. This review also found that comparably little region-specific research has been undertaken on this topic, which suggests further research in this area with the potential for broader application is needed.

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Appendix I: Table of search terms

Concept/overarching theme	Primary search term	Alternate term(s) and MeSH terms
Nursing workforce	Nurs* OR midwife*	OR RAN OR remote area nurse* or RIPRN OR RIPERN OR scheduled medicines RN
Attraction, retention and resignation	Recruit* OR retention OR resign*	OR hiring OR hire OR attrition OR "intent* to stay" OR "intent* to leave" OR intent OR employ* OR attract* OR turnover
Perceptions, values and motivations	Perspective* OR value* OR motiv*	OR experience* OR feel* OR knowledge OR understanding OR belief* OR view* OR priorit* OR expect* OR attitude*
Rural, remote and isolated	Rural OR remot* OR isolat*	OR regional OR "small town" OR "country area"
Australia	Australia*	

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