





BMJ Open Identifying features of quality in rural placements for health students: scoping review

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ABSTRACT

Objectives To explore and synthesise the evidence relating to features of quality in rural health student placements.

Design Scoping review.

Data sources MEDLINE, CINAHL, Embase, ProQuest, Informat, Scopus, ERIC and several grey literature data sources (1 January 2005 to 13 October 2020).

Study selection The review included peer-reviewed and grey literature from Organisation for Economic Co-operation and Development listed countries that focused on quality of health student placements in regional, rural and remote areas.

Data extraction Data were extracted regarding the methodological and design characteristics of each data source, and the features suggested to contribute to student placement quality under five categories based on a work-integrated learning framework.

Results Of 2866 resulting papers, 101 were included for data charting and content analysis. The literature was dominated by medicine and nursing student placement research. No literature explicitly defined quality in rural health student placements, although proxy indicators for quality such as satisfaction, positive experiences, overall effectiveness and perceived value were identified. Content analysis resulted in four overarching domains pertaining to features of rural health student placement quality: (1) learning and teaching in a rural context, (2) rural student placement characteristics, (3) key relationships and (4) required infrastructure.

Conclusion The findings suggest that quality in rural health student placements hinges on contextually specific features. Further research is required to explore these findings and ways in which these features can be measured during rural health student placements.

INTRODUCTION

Health student placements facilitate student translation of theory to practice using authentic work-related tasks in different settings. Health student placements often involve the student delivering elements of care directly to service clients. As such, student placements are essential for skill

Strengths and limitations of this study

- This review offers a systematised overview of the literature relating to features of quality in rural health student placements.
- The scoping review methodology allowed for the inclusion and mapping of peer and non-peer-reviewed literature and greater conceptual clarity of the phenomenon of interest.
- It was difficult to differentiate findings specifically related to student placements in regional, rural and remote locations due to variation in contextual information provided in each data source.
- Literature not reporting on research conducted in a practice setting and not published in English were excluded.

development in complex health environments.¹ In Australia, health student placements are considered a form of work-integrated learning (WIL),² and defined as an unpaid period of time in which a student attends an approved professional workplace as a requirement of the course they are studying.³ Health student placements occur in a broad range of settings, including hospitals, private practice, community health and specific communities, and within metropolitan, regional, rural and remote settings. Context has an important role in any student learning. Geographical features of context which may afford or constrain different elements of learning, especially in relation to clinical skills experiences and supervision, have long been absent from considerations of quality and curriculum design in student placements.⁴

Placing students in rural, regional and remote (referred to collectively as rural herein) settings exposes them to skills and experiences unique to this area of practice and embedded within the social complexities



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of a rural community.^{5,6} In addition to providing relevant learning opportunities, rural student placements can enhance delivery of health services, foster rural identity, encourage future clinicians to practice rurally and promote cultural safety by developing skills required to effectively work with clients and peers from culturally diverse backgrounds.^{1,7,8} There are elements of rural practice that differ from metropolitan settings. For example, rural health student placements enhance learning outcomes by providing greater opportunities for patient contact and developing an understanding of community through opportunities to socially integrate on a microlevel.^{4,9}

To date, the understanding of student placement quality has been broadly guided by professional accreditation standards, national WIL recommendations and higher education quality systems.^{10,11} These standards, recommendations and systems acknowledge that high-quality WIL involves a range of stakeholders and encompasses temporal dimensions that speak to features beyond merely outcomes of WIL. As such, the term 'quality' in the context of WIL may be defined differently by different stakeholder groups and in various settings. Reflecting this (and to allow for an inductive process) this review did not adopt a predetermined definition of 'quality' in WIL. Instead, this review allowed multiple viewpoints on what constitutes quality in WIL and collected these understandings from grey and published literature from the perspective of all WIL stakeholders.

Published standards and recommendations for high-quality WIL also typically offer educational WIL models that are generalist in nature. Subsequently, the defining features of quality in the evaluation of student placements have been based on educational WIL models that are generic and do not account for the rural context and/or the unique nature of rural communities and practice. There are complexities in assessing the quality of rural health student placements when these activities are embedded within the broader learning curriculum.¹² Predetermined definitions of quality student placements have invoked an assumed norm which is most frequently metropolitan in character due to the dominance of urban populations and privilege.¹³ This has resulted in deficit positioning and othering of rural communities compared with metropolitan centres.^{9,14}

A critical pedagogy of place is a framework gaining traction that could be used to underpin rural health student placement design and evaluation.^{4,15} Place is more than a location. A sense of place forms a strong part of one's identity.⁹ Using a place-based approach in research provides a lens which assumes that place impacts the learning environment, sense of community, social relations, access to resources and community, and opportunities for engagement in community. Commensurate with this pedagogy is rural standpoint theory,¹⁶ which uses a rural frame of reference, and assumes a marginalised rural identity to understand an issue. As a rural-focused network, the authors have used their combined knowledge of rural

communities and professional practice and used place-based pedagogy and rural standpoint theory as a lens to discuss the findings of this scoping review.

Considering the uniqueness of professional practice in a rural location and the professional development opportunities associated with student placements in these areas, there is a need to ensure quality health student placements specific to rural environments. Identifying the possible mechanisms that lead to high-quality rural health student placements may assist education institutions and industry partners to design placements that have positive outcomes for stakeholder groups such as health students, rural communities, health organisation staff and education providers.

OBJECTIVE

The objective of this review was to explore and synthesise the evidence relating to features of quality in rural health student placements. To achieve this objective, we sought to answer the following research question: What comprises quality in rural health student placements?

METHODS

Scoping review

This review followed the Joanna Briggs Institute scoping review methodology¹⁷ and is reported as per the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews.¹⁸ The scoping review methodology was deemed appropriate for this study as there is significant diversity in the body of knowledge related to this topic and no standardised definition of quality for rural student placements.^{19,20} In line with the purpose of a scoping review suggested by Peters *et al*,¹⁷ this review sought to map key concepts and provide an overview of current literature focused on the review topic. This scoping review was approached from a subjectivist epistemology, allowing the researchers to find, engage with and subjectively interpret several sources of knowledge.²¹ The researchers are situated within Australian University Departments of Rural Health (UDRHs) and have experience in designing, coordinating or evaluating rural health student placements. UDRHs provide education and support for health students with the aim of developing the Australian rural health workforce.²² Within this stance, the researchers incorporated broad evidence sources that contributed multiple viewpoints of quality in rural health student placements. In recognition that rural WIL affects multiple stakeholder groups (ie, health students, educators, rural communities, rural health organisations and their staff) this review included sources that presented the viewpoints of any placement stakeholder group. The researchers also used reflexivity to engage with each scoping review step and actively interpret review findings through recognition and connection with their own experiences. The subjectivist approach to this review allowed for the final results to detail features

of rural health student placements that contribute to quality, based on the data sources and the research team's experiences, expertise and knowledge.¹⁹

Eligibility criteria

Population of interest

This review considered articles that included rural, regional and remote student placement stakeholder groups (ie, tertiary health students, university staff or education providers, host or health organisation staff including supervisors, administrators, health professionals, service users and other community members).

Concept

Articles were included if they discussed the quality or effectiveness of rural, regional or remote student placement, particularly features, indicators or aspects of placements that contributed to understandings of quality from the perspective of the stakeholder groups. This was a complex undertaking, considering the subjective nature of the definition of quality and the lack of any universal definition of quality in rural student placements. For this reason, an existing WIL framework was used¹⁰ to inform the development of the data extraction tool. Campbell *et al*'s framework to support assurance of institution-wide quality in WIL is an evidence-based and comprehensive instrument that groups elements required for high quality WIL into four domains: student experience, curriculum

design, institutional requirements and stakeholder engagement.^{10 23} The tool designed for data collection to conduct this scoping review used the four domains suggested by Campbell *et al*¹⁰ and an additional category labelled 'other' to group the data that was extracted. This approach enabled categorisation of the data and was used for guidance due to the subjective nature of the term quality.

Context

This review focused on research conducted in regional, rural and remote areas in Organisation for Economic Co-operation and Development listed countries because rural health student placements may differ significantly in non-listed countries (table 1).²⁴ For all Australian data sources, the term 'rural' incorporated all areas outside of Australia's major cities, and thus is inclusive of rural, remote and regional settings.²⁵ For international data sources, the reviewers used author-reported context for inclusion, that is, if an international study reported the study location as rural, regional or remote, it was included.

Information sources

This scoping review considered all published articles that reported on primary research with quantitative, qualitative or mixed-methods design. Descriptive observational study designs including case series, individual case reports and descriptive cross-sectional studies were considered

Table 1 Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
<ol style="list-style-type: none"> 1. Population: All student placement stakeholder groups including university level students, university course coordinators, UDRH workers, host organisation staff including supervisors, administrators, health professionals, service users and other community members. 2. Concept: Health students completing student placements (including but not limited to medicine, allied health, psychology, physiotherapy, speech pathology, occupational therapy, social work, pharmacy, podiatry, nutrition, dietetics, radiography, medical imaging, medical laboratory science, medical radiation, audiology, chiropractic, dentistry, exercise physiology, optometry osteopathy, nursing, midwifery, paramedicine, prosthetics, Aboriginal health), factors, influences or characteristics that impact placements. 3. Context: student placements implemented in regional, rural or remote areas in OECD countries: Australia, Austria, Belgium, Canada, Chile, Columbia, Czech republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, NZ, Norway, Poland, Portugal, Slovak republic, Slovenia, Spain, Sweden, Switzerland, Turkey, UK, USA. 4. Student placements conducted in practice setting for example, hospitals, community health services, school settings, disability services. 	<ol style="list-style-type: none"> 1. Does not meet inclusion criteria for population 2. Does not meet inclusion criteria for concept, that is, not about health students completing student placements 3. Does not meet inclusion criteria for context that is, regional, rural or remote student placements in OECD countries 4. Does not report on factors, influences or characteristics that impact student placements 5. Does not report on research conducted in a practice setting, that is, focused purely on simulation 6. Was not published in or after 2005 7. Full text is not published in English 8. Systematic review focused on a research question that met any exclusion criteria 9. Publication is a report of a research protocol (no findings included) 10. Full text not available

OECD, Organisation for Economic Co-operation and Development; UDRH, University Departments of Rural Health.

for inclusion. Reviews that focused on research questions that met the inclusion criteria were included as a data source. Grey literature, opinion papers, reports and doctoral theses were also included.

Search

Part A: peer-reviewed articles

An initial search of MEDLINE and CINAHL was conducted by three researchers to identify articles that explored the review topic and create a list of relevant search terms. Four researchers piloted the search terms in eight rounds of searches using different keyword combinations. After the pilot round, database searches using the same keywords were conducted in MEDLINE, CINAHL, Embase, ProQuest, Informit, Scopus and ERIC on 13 October 2020. Peer-reviewed articles published from 2005 to 2020 were included in this scoping review. The keyword combinations and database searches used in this review are shown in online supplemental appendix A.

Source of evidence selection

The resulting papers were collated and uploaded into Covidence (www.covidence.org) and duplicates were removed. After pilot testing, researchers assessed the titles and abstracts of the resulting papers against the inclusion/exclusion criteria for the review (table 1), with each paper being assessed by two researchers. Where there was a discrepancy between reviewers a third party made the final decision for inclusion or exclusion. Potentially relevant sources were then retrieved in full, and their citation details imported into Covidence. The full text of selected papers were assessed against the inclusion criteria by two independent reviewers. Again, where there was a discrepancy between reviewers, a third party made the final decision. Reasons for exclusion of papers at the full text stage were recorded. The results of the search and the study inclusion process are reported in figure 1.

Part B: grey literature

A subgroup of researchers contacted each of the sixteen Australian UDRHs, outlining the focus of scoping review and requesting any known relevant grey literature. Searches were also conducted on six relevant Australian websites. Due to resource limitations, further searching of the grey literature was not feasible. Doctoral theses identified in the database searches for peer-reviewed literature were added to the list of grey literature if their data was not already available in peer-reviewed publications. Opinion pieces sourced via database searches were included in the grey literature.

Source of evidence selection

The full text of all grey literature was assessed by two independent reviewers. The articles that were identified in the grey literature search were subject to assessment against the same inclusion and exclusion criteria as the peer-reviewed literature, excluding any criteria specific to research documents (ie, exclusion criteria 5, 8 and 9 were

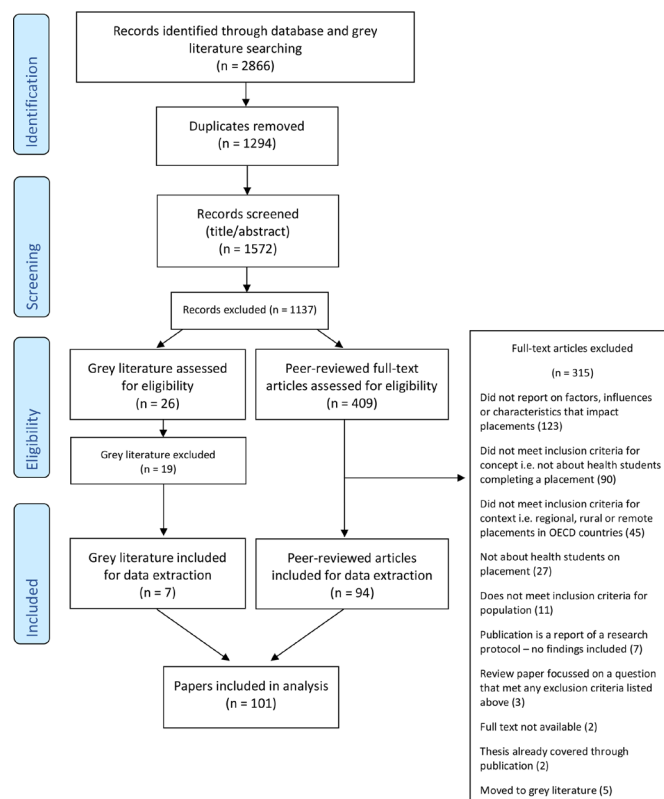


Figure 1 PRISMA flow diagram of article selection for inclusion in the review. OECD, Organisation for Economic Cooperation and Development; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

not applied). Where there was a discrepancy between reviewers a third party made the final decision.

Data charting process

A data extraction tool was created in Covidence (for peer-reviewed literature) and replicated in Microsoft Excel (for grey literature). The tool was designed to extract the methodological and design characteristics of each data source, as well as the features suggested to contribute to student placement quality. The extraction of features related to quality in student placements were organised under five categories based on Campbell *et al's* WIL framework,¹⁰ and included student experiences, curriculum design, institutional requirements, stakeholder engagement and other factors. The tool was trialled by two researchers and after discussion with the research team, the tool was agreed on. Data extraction and charting of the literature was then completed by 10 researchers. Each article underwent extraction by one researcher and was checked by another. The researchers conducting data extraction met frequently to discuss the use of the extraction tool and raise any questions. Throughout this process, some articles that did not meet the inclusion criteria for the review were identified. These were sent back for full text review and an independent researcher made the final decision regarding inclusion, exclusion or inclusion in grey literature. The data that were extracted included specific details about the participants, concept,

context, study methods and key findings relevant to the review questions. A data chart comprised of the information extracted from each data source is shown in online supplemental appendix B.

Data analysis and synthesis of results

This scoping review used tabular, descriptive and narrative methods to present the data extracted from the included studies. Content analysis was used to answer the research question and map the themes found in the literature. An inductive approach to content analysis using the phases, suggested by Erlingsson and Brysiewicz,²⁶ was used by five researchers who completed data extraction and charting. Data had been extracted from papers in the form of short excerpts, each of which was treated as individual ‘meaning units,’ and not further condensed. The extraction of excerpts of text were guided by the data extraction tool as explained in the data charting process above. Each member of the data analysis team coded an allocated number of meaning units. The researchers then discussed and cross-checked the codes to ensure consistency. The frequency of code presentations was used to give weight to and identify features that were more common and frequently associated with student placement quality. At the completion of these tasks, codes were organised into categories that were amalgamated into overarching domains. During each step of the data extraction, charting, coding and arranging domains, the researchers reflected on and discussed the emerging findings from a rural standpoint. These reflective sessions were used to assist with conceptual clarity. The final version of the analysis therefore resulted in a conceptual map of domains that contribute to placement quality and the features existent within those domains.

Patient and public involvement

No patients were involved in this scoping review.

RESULTS

A total of 2866 records were identified during the database search. After title and abstract screening and removal of duplicates, 435 papers (409 peer-reviewed and 26 grey literature) were included for full-text assessment. After application of the inclusion and exclusion criteria a total of 101 papers were included in the final analysis (94 peer-reviewed and 7 grey literature, see online supplemental appendix C). The number of evidence sources and those included/excluded are shown in [figure 1](#).

Characteristics of sources of evidence

As shown in the data chart (online supplemental appendix B) and summary of included literature ([table 2](#)), most of the literature is based in the Australian context (n=77).^{8 22 27–101} There is variability in the sites in which student placements were undertaken, and the length of placement varied from 6 days to 52 weeks. Published research focused on placements for medicine (n=45) and nursing students (n=42).

No literature explicitly defined quality in rural health student placements, although all papers described features of quality. Examples of proxy indicators for quality included in the literature were ‘satisfaction’,^{10 55} ‘positive experiences’,^{98 102} ‘overall effectiveness’¹⁰³ and ‘perceived value’.¹⁰⁴ The literature also demonstrated a bias towards reporting the positive aspects of rural student placements. However, some negative aspects of the domains were identified, for example, geographical isolation^{49 68 105} and poor-quality supervision,^{67 74 106} although these were mentioned less frequently.

Table 2 Summary of study characteristics from the included literature

Study characteristics	Summary of findings (no of studies)
Year of publication	Range 2005–2020
Country of publication	Australia ⁷⁷ ; Canada ¹⁷ ; USA ⁵ ; England ¹ ; Mixed ¹
Methods used in study	Interviews ⁵² ; Survey ⁴⁷ ; Focus groups ²⁷ ; Textual analysis ¹² ; Literature review ⁶ ; Observations ¹ ; Academic performance. ¹ Studies that used mixed or multi-methods (³⁶ ; 36%)
Population studied	Students ⁸² ; Supervisors ³⁹ ; Host organisation staff ²⁵ ; Education organisation staff ¹² ; Community members ⁶ ; Graduates ⁵ Studies that included mixed populations ⁴¹ (40%)
Placement sites	Mixed/multiple sites ⁴⁹ ; not reported ²⁴ ; hospital or multipurpose service ¹⁵ ; First Nations service provider or community ⁶ ; private practice ⁴ ; community setting ² ; school ¹
Discipline/s included in study population	Medicine ⁴⁵ ; nursing ⁴² ; occupational therapy ¹⁹ ; physiotherapy ¹⁵ ; speech pathology ¹⁴ ; dentistry ¹⁴ ; pharmacy ¹¹ ; allied health (not specified) ¹⁰ ; social work ¹⁰ ; midwifery ⁸ ; dietetics/nutrition ⁷ ; psychology ⁷ ; other or non-specified health course ⁷ ; medical radiation science ⁵ ; podiatry ³ ; paramedicine ³ ; exercise therapy or physiology ² ; oral health therapy ¹
Length of placement	Reported placement lengths (33 studies); Range: 6 days to 52 weeks (average 10 weeks) Study included placements of mixed lengths (22 studies) Placement length not reported (46 studies)

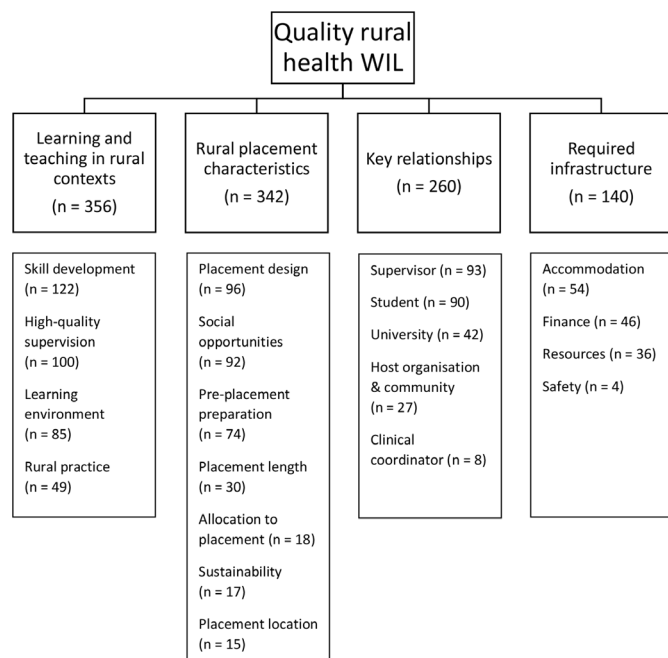


Figure 2 Features of quality in rural health student placements within four overarching domains (n=count number from content analysis). WIL, work-integrated learning.

Synthesis of results

From the included literature, the team inductively developed 83 codes for features of quality in rural health student placements. Of these, the five most prominently coded features were positive opportunities for developing relationships between student/s and the community (n=49)^{22 27 28 32–34 36 37 39 41 42 44 48 50 53 54 57–61 63 66 75 78–81 84 88–91 94–98 100–102 104 107–112}; opportunities to learn about rural practice (n=49)^{27 29 30 32 33 37 41–44 48 50 53 54 57–60 63 66–68 78–80 82 85 86 88 93–96 98 100–102 108–117}; exposure to a broad clinical caseload (n=39)^{27–30 32–37 40 43 45–50 52 57 59 60 66 67 71 79 80 82 85 88 96 100 103 104 113 114 116 118 119}; positive clinical learning environment (n=37)^{27 29 30 32 34 38 40–43 50 52 54 57 59 67 69 71 76 77 79 85 87 88 91 92 100 102 104–106 108 110 115 119–121} and opportunities to develop generic health professional skills (n=37)^{9 30 33 34 37 39–41 43 44 46 47 50 52 59–61 66 68 71–73 81 83 85 87 92–94 100 101 103 106 107 109 115 116}.

The 83 codes were organised into 21 categories and four overarching domains pertaining to features of quality in rural health student placements. The overarching domains were learning and teaching in rural contexts, rural student placement characteristics, key relationships and required infrastructure. The number of times each feature of quality was coded in the literature is shown in figure 2.

Learning and teaching in rural contexts

The learning and teaching in rural contexts domain comprised five categories focused on the learning environment, skill development, supervision, rural practice and capability development. Codes relating to the 'learning environment' focused on positive clinical learning environments, students feeling welcomed and valued, and having access to a range of learning

opportunities including cultural learning, reciprocal learning with supervisors, interprofessional and peer learning. 'Skill development' referred to opportunities to develop profession-specific and generic skills and access to a broad clinical caseload to enhance skill development. 'High-quality supervision' was related to the method of teaching used by supervisors, adequate access to supervisors, the supervision process fitting with the workload and supervisor benefits of providing student supervision. 'Rural practice' related to opportunities to learn about the nature of rural practice during placement, while capability development related to the opportunities provided during placement to develop a sense of identity and belonging, confidence, autonomy and cultural awareness.

Rural student placement characteristics

The rural student placement characteristics domain incorporated five categories including allocation of placement, length of placement, preplacement preparation, social opportunities and placement design. Codes relating to 'allocation of placements' described the recognition of the effect of geographical isolation, the opportunity for students to choose a rural placement and student needs being considered in allocation. 'Length of placement' referred to the positive and negative aspects of placement duration. The 'preplacement' preparation category comprised codes describing a range of preparation activities for students, including cultural and general orientation, social and peer preparation, and educational preparation. 'Social opportunities' referred to community immersion activities and other opportunities to support students to participate in social activities and explore rural areas. 'Placement design' related to the sustainability of the placement, placement goals and objectives aligning with stakeholder needs, adequate student workload and placements enhancing service capacity.

Key relationships

The key relationships domain comprised six categories surrounding a range of stakeholders, including universities, clinical coordinators, host organisations and communities, supervisors and the students. Codes relating to the 'university' category were focused on relationship maintenance and communication with other stakeholders. The 'clinical coordinator' category codes related to the availability of the coordinator role to other stakeholders, and maintenance of communication and relationships with other stakeholders. The 'host organisation and community' category related to codes regarding the inclusion of the host organisation and rural community in placement design, and support for them to prepare for student placements. The 'supervisor' category referred to the positive relationship and communication of supervisors with other stakeholders, their work to build and demonstrate community relationships, and support for supervisors. The 'student' category comprised codes about the positive relationships and communication with

other stakeholders, availability of peer support and the supported well-being of students.

Required infrastructure

The required infrastructure domain comprised four categories including accommodation, safety, finance and resources. Codes relating to the ‘accommodation’ category referred to the availability of accommodation that is affordable and provides suitable social experiences. ‘Safety’ referred to the physical safety of students and other stakeholders during placement, including safety on the roads. Codes regarding the ‘finance’ category referred to adequate funding for the placement site, for students and for any travel during placement. Other resources within the infrastructure theme included access to the internet, physical or clinical equipment and learning spaces for students.

DISCUSSION

This scoping review identified and explored the literature related to features of quality in rural health student placements. The review did not find a published definition of quality in rural health student placements or any existing frameworks of quality specific to rural health student placements. Using a subjectivist approach, researchers mapped a broad range of features of quality in rural student placements and organised these within four domains: learning and teaching in rural contexts, rural student placement characteristics, key relationships and required infrastructure.

Understanding the possible mechanisms that lead to high-quality rural health student placements may assist education institutions and industry partners to design and benchmark placements that have positive outcomes for diverse stakeholder groups. Some of the identified features of quality in rural health student placements that were identified in this review can be mapped and measured quantitatively. These features constituted the overarching domain of required infrastructure and were also present across other quality domains such as rural student placement characteristics. Measurable features of quality in rural health student placements include the availability and affordability of accommodation and financial support; student access to resources such as internet, clinical equipment and vehicles; the processes of placement design; activities included in the placement; placement learning objectives and access to clinical supervision. These features could be systematically implemented and measured to promote high-quality rural health student placement experiences, although measurement tools specific to rural health student placements and suitable for use across different rural contexts and universities would be required to track more quantitatively measurable features.

In contrast to the measurable features of placement quality identified in this review, three of the four domains that contribute to placement quality reflect features

that are more conceptual and difficult to measure. This is where the complexity of implementing and fostering experiences that create quality in rural health student placements lie. These features include social and cultural connection, feeling safe, opportunities to grow autonomy, fostering belonging, building confidence, developing professional identity, feeling welcomed and valued, and high-quality supervision. These features are more nuanced and uniquely experienced by individuals and are yet to be well conceptualised in the rural health literature, as seen with the capability development concepts of identity and belonging in the WIL and broader education literature.^{122–124}

From a rural standpoint¹⁶ and drawing from the ideas of Handley *et al*,¹²² Trede¹²³ and Levett-Jones *et al*,¹²⁴ identity and belonging are interrelated due to their dynamic, relational and contextual underpinnings. By engaging in rural healthcare systems and practice, and with rural people and communities, students may develop a broader sense of professional identity—one which incorporates an understanding of their role to meet the health needs of all people (including rural people) and, that is, rural-informed, drawing on relational approaches embedded in rural healthcare. In addition, the development of workforce mechanisms that further emphasise and enhance a sense of belonging for students on rural health student placements could support student learning in rural clinical settings. However, these quality features of rural health student placements and their potential impact are not currently well measured or celebrated in university assessment processes. Further research is required to measure nuanced meanings of quality related to identity, belonging, connection and confidence in rural health student placements.

The rigour of included studies was not assessed in this scoping review, which is consistent with scoping review methods discussed by Arksey and O’Malley.¹⁹ However, common features and gaps in the literature identified through this review could shape the direction of future research to measure the quality of rural health student placements. The studies reported here predominantly focused on perception, positive experiences and satisfaction of stakeholders as measures of quality. While these perspectives and experiences of stakeholders are valuable, objective measures of rural health student placement quality and theoretically informed research is lacking. In the literature, some stakeholders were represented more often, for example, students and supervisors; with some represented less often, such as community members or representatives. Community partnerships and relationships are integral to rural health student placements and should be included further in research related to rural health placement quality. Another stakeholder voice largely missing from the literature is that of university staff. Given the reported value of rural student placements for other stakeholders, and the responsibility of universities to ensure the quality

of higher education, universities and rural communities need to be privileged as stakeholders in future research to ensure a more complete view of quality in rural health student placements.

The strength of this scoping review was its rigorous, systematic approach to finding, charting and mapping the literature. The generalisability of the findings to individual health disciplines is limited as many data sources combined findings from several different disciplines. In particular, the evidence was dominated by sources focused on medicine and nursing student placements, which may not be applicable to other disciplines. The published literature is also predominantly focused on the Australian setting (77 of 101 articles were Australian), which may reduce the generalisability or applicability of the findings to other countries. This dominance may also signify the importance of conducting further research in other countries that use rural health student placements as part of tertiary curriculum so that standards for quality in this area can more adequately reflect international needs.

The reviewers relied on the contextual definition provided within each data source to identify information related to rural locations and thus the review results could not be differentiated for those in rural, regional and remote contexts. This may limit the application of the findings to specific placement contexts. This review was not able to differentiate the effect of different placement models on rural health student placement quality as many data sources either did not state the placement design or combined findings from several placement types. Educational-based or community-based activities undertaken in a rural setting were not included in this review unless specifically attached to rural health placements. This review, therefore, does not provide evidence related to the quality of rural educational or standalone community engagement activities.

A further consideration is whether the features pertaining to high-quality health student placements that were found in this review are also applicable to health student placements conducted in other settings such as those in metropolitan locations. The framework for quality assurance of WIL published by Campbell *et al*¹⁰ provides a generic approach to ensuring quality across different WIL contexts and was used as a basis for the data extraction tool used in this review. Many of the placement elements found in this review may be applicable to both rural and metropolitan settings, however, this would need to be investigated in future research as health placements are contextually influenced. This is exemplified by the way the review findings did not replicate but extended the framework proposed by Campbell *et al*.¹⁰ The findings of this review should, therefore, be considered as a reflection of the rural context from which the literature was derived.

CONCLUSION

This scoping review identified and explored peer-reviewed and grey literature related to features of quality in rural health student placements. No universal definition of quality in rural health student placements was found. The findings of the review demonstrate that quality in rural health student placements hinges on contextually specific domains relating to learning and teaching in rural contexts, rural student placement characteristics, key stakeholder relationships and required infrastructure. Some of the quality features that constitute these domains are measurable, while others are nuanced and require further research to conceptualise how they can be implemented and measured in rural contexts. The findings of this review can be used by those responsible for developing and coordinating rural health student placements to enhance the quality of these activities for involved stakeholders.

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