









# BMJ Open What do Australian university staff perceive are the features of high-quality rural health student placements? A sequential explanatory study

Elyce Green <sup>1</sup>, Rohan L Rasiah <sup>2</sup>, Claire Quilliam <sup>3</sup>, Leigh Moore <sup>4</sup>,  
Melissa Ridd,<sup>4</sup> Jane Ferns <sup>5</sup>, Lyndal Sheepway <sup>6</sup>, Catherine Seaton,<sup>7</sup>  
Carolyn Taylor <sup>8</sup>, Kathryn Fitzgerald <sup>9</sup>

**To cite:** Green E, Rasiah RL, Quilliam C, *et al.* What do Australian university staff perceive are the features of high-quality rural health student placements? A sequential explanatory study. *BMJ Open* 2025;**15**:e098381. doi:10.1136/bmjopen-2024-098381

► Prepublication history and additional supplemental material for this paper are available online. To view these files, please visit the journal online (<https://doi.org/10.1136/bmjopen-2024-098381>).

Received 22 December 2024  
Accepted 30 May 2025



© Author(s) (or their employer(s)) 2025. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ Group.

For numbered affiliations see end of article.

## Correspondence to

Dr Elyce Green;  
[elgreen@csu.edu.au](mailto:elgreen@csu.edu.au)

## ABSTRACT

**Objectives** The aim of this study was to explore the features of high-quality rural health student placements from the perspective of university staff involved in designing, delivering and evaluating these programmes.

**Design** A sequential explanatory mixed methods design was employed, integrating quantitative survey data with qualitative interview findings to provide a comprehensive understanding of the research question.

**Setting and participants** The study was conducted online and sampled staff from universities across Australia, focusing on rural health student placements. The study involved 121 university staff members who participated in the survey, with 10 of these participants also taking part in follow-up qualitative interviews.

**Methods** Quantitative data were collected using an online survey distributed to university staff involved in designing, delivering and evaluating rural health student placements. The survey included Likert scale, open-ended and demographic questions, and a preliminary analysis was used to write the interview questions. Qualitative data were gathered through semi-structured interviews, which were transcribed and analysed using the Framework approach. The quantitative and qualitative results were integrated to produce a narrative summary of findings.

**Results** Key features identified as essential for high-quality rural health placements included safe and affordable accommodation, financial support and personal safety. High-quality supervision, cultural awareness training and opportunities for interprofessional education were also highlighted. The qualitative findings provided depth to the quantitative data, emphasising the importance of structuring learning within a continuum of education and fostering connections through co-location and community engagement.

**Conclusions** This study identifies fundamental features of high-quality rural health placements in Australia, including accommodation, student safety, supervision and cultural responsiveness training. These findings can inform the design, delivery and evaluation of rural health student placements, contributing to the quality of these programmes as an efficacious learning experience.

## STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study included the perspectives of professional and academic university staff whose work spanned across 22 different health disciplines.
- ⇒ The study sampled university staff from various geographical contexts in Australia to allow for representation of views across diverse education locations.
- ⇒ The mixed method design of this study allowed for the exploration and elaboration of the findings from the national survey which supports the conclusions drawn in the paper.
- ⇒ The snowballing recruitment method affected our ability to calculate a survey response rate, which affects the generalisability of the findings.

## INTRODUCTION

Rural health student placements are a critical component of health professional education, essential for meeting clinical training requirements in pre-qualifying health degrees in Australia. These placements, often conducted in rural settings, provide students with invaluable hands-on experience and a deeper understanding of health as a person-centred phenomenon within a social context. Despite the recognised importance of rural health student placements, there is a need for comprehensive insights into what constitutes high-quality rural placements, particularly from the perspective of university staff who play a pivotal role in designing, delivering and evaluating these programmes. This study aimed to explore the determinants of high-quality rural health student placements from the viewpoint of university staff involved in these processes. By focusing on the unique opportunities and challenges presented by rural settings, this research seeks to contribute to a holistic understanding of how to enhance the quality of these placements,

thereby supporting the development of a capable and well-prepared health workforce.

## BACKGROUND

Rural (the term referring to parts of Australia classified under the Modified Monash Model as MM2-7, see: <https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm>) health student placements are a type of work-integrated learning (WIL) and a fundamental component of the education required to become a health professional. Reflecting this, pre-qualifying health degrees in Australia must include WIL in their curricula to meet clinical training requirements.<sup>12</sup> Many WIL experiences in the health disciplines are undertaken as student placements, defined in Australia as a period of time in which a student is positioned in an industry organisation for the purpose of meeting learning outcomes relevant to their course.<sup>3</sup> Student placements are pivotal for learning the complexity of health as a person-centred phenomenon situated in a social context.<sup>4-6</sup> The significance of placements for student learning creates an imperative for stakeholders involved in the design and delivery of these programmes to have access to information to ensure their quality. Health student placements are generally cross-institutional and require collaborative stakeholder efforts and thus can be complex to deliver.<sup>7</sup> In rural areas, this complexity can be heightened by the unique contextual features that influence placement programmes, such as being geographically distanced from university campuses, reduced resource availability and a reduced number of health professionals.<sup>8</sup> This creates an impetus to generate knowledge that can guide the facilitation of health student placements in rural areas.

Considering the diversity of stakeholders involved in health student placements, it is important that understandings of quality represent multiple perspectives. An extensive amount of research on health student placements has focused on the perspectives of students (see<sup>9</sup>). The student experience is important, but an exploration of the perspectives of university staff could help triangulate these findings and provide a more holistic understanding of quality. University staff have knowledge related to the processes and constraints related to creating health student placements that are important if we are to fully understand how to create high-quality health student placements within the context of tertiary organisations. This is particularly important for facilitating health student placements in rural areas where there are unique resourcing and environmental factors.

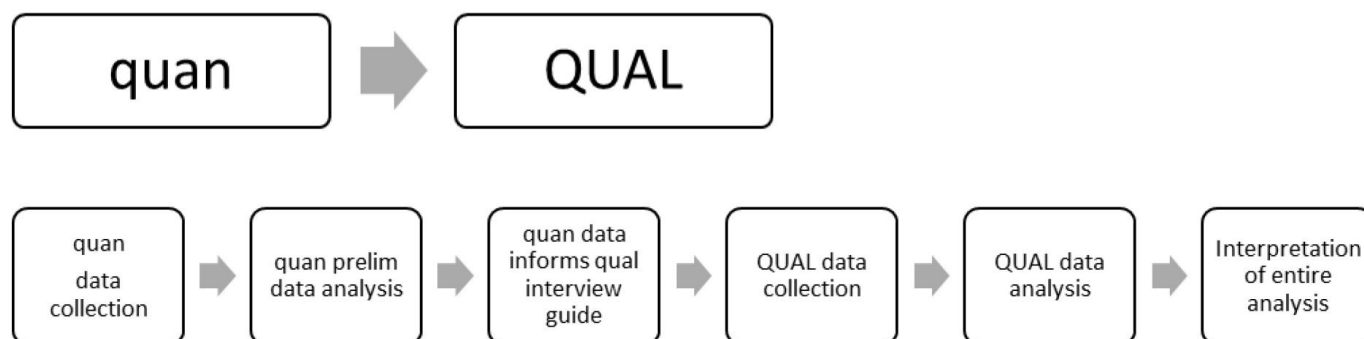
In Australia, university staff involved in rural health placements typically fall into two groups. The first group are employees of tertiary-funded programmes that own the programmes of study in which students are enrolled. These university staff are primarily consumers of rural health placements. The second group are staff employed at University Departments of Rural Health (UDRH), who work under a health workforce-funded initiative.<sup>10</sup> UDRH

staff are based in rural areas and act as facilitators of rural health placements for students who are often enrolled at a university different to the UDRH university. Both groups of university staff are stakeholders in rural health placements and offer important and different perspectives about quality. Despite this, there has been a paucity of research exploring the perspectives of either group of Australian university staff on what constitutes a high-quality health student placement.<sup>9</sup>

Research that has explored university staff perspectives of placement quality has generally clustered university staff as part of broader stakeholder groups and not explored their perspectives as a standalone group. For example, Craig *et al*<sup>11</sup> included university staff in their research focused on the outcomes of a service learning placement in rural Australia. Their sample included local facilitators, academic staff, health professionals and representatives of local health or community services. The interviews were analysed as one dataset, providing an overarching perspective of the quality of the programme under evaluation. Hosken *et al*<sup>12</sup> similarly used a combined sample of social work students, field educators, social work university liaison staff and staff involved in the project team to evaluate a rotational social work field placement in regional Australia. Other research, such as that conducted by Jones *et al*<sup>13 14</sup> has explored students and academic perceptions of a rural service learning placement on work readiness and employability of students<sup>14</sup> and on the features that promote engaged health partnerships.<sup>13</sup> This research grouped the results of the sample together and did not focus solely on quality during placements but used other outcomes as proxy indicators of quality (work readiness, employability, engaged partners).

One study conducted by Johnson and Blinkhorn<sup>15</sup> focused specifically on the views of university staff and supervising clinicians on the feasibility and acceptability of a rural dentistry placement. This enabled the authors to elicit the opinions of these stakeholders about the aspects of the placement that contributed to a high-quality experience and the issues that affected the quality of the programme from a pedagogical and practical perspective. This study was the only one of its kind and had still grouped university staff with placement supervisors. Six interviews were conducted by Johnson and Blinkhorn,<sup>15</sup> of which three participants were university staff.

It is evident that further work is required to explore features of quality in rural health student placements from the perspective of university staff. This study aimed to provide depth and breadth to the current evidence related to university staff perspectives of high-quality rural health placements. The study focused on exploring the features of high-quality rural health student placements from the perspective of non-UDRH university staff who have a role in designing, delivering and/or evaluating these placements for health students. Academic and professional staff perspectives were included from a range of institutions and health professions. Views of university staff from a diversity of geographical areas classified as



**Figure 1** Sequential explanatory design based on the work of Creswell *et al.*<sup>18</sup> \*Capitalisation of methods identifies that the qualitative component of the study was given more weight.

rural locations were also included. By including a diverse sample of university staff from across Australia, this research contributes to holistic understandings of rural health student placement quality, including how to create and evaluate these programmes.

### Research question

This study was guided by one broad research question: what do university staff believe are the determinants of high-quality health student placements in regional, rural and remote Australia?

## METHODS

This study was positioned in the constructivist paradigm and ontologically emphasised the role of individuals in constructing their own reality and the role of the researchers in the co-construction of knowledge.<sup>16</sup> This study is part of a larger research programme seeking to determine the features of high-quality rural health student placements. This article reports on Component A of the larger research programme<sup>17</sup> and used an explanatory sequential mixed methods design (figure 1)<sup>18</sup> with quantitative data collected from a cross-sectional survey and used to construct interview questions for further exploration of findings. Integration between the methods was undertaken at the stage of qualitative interview guide design (which drew on the preliminary findings of the quantitative data—see online supplemental file 3) and by viewing and interpreting both datasets together, although priority was given to the qualitative data. The research methods are reported in line with the COREQ and CROSS research checklists which are presented as online supplemental files 1 and 2.

### Study population and recruitment

A snowballing recruitment strategy was used in this study. The research team conducted an online search for university staff responsible for WIL programmes in health degrees and drew on their personal networks to map key contacts at all 43 universities across Australia. A generic email and survey link was distributed to 478 university staff with a prompt to forward the email to other relevant staff. University staff (professional and

academic) were eligible to participate in the survey if they self-identified as having a role in the development, delivery and/or evaluation of health student (Australian Qualification Framework level 7 (bachelor's degree or higher))<sup>19</sup> placements in rural Australia. The only exclusion criteria were staff who were employed at a UDRH, as this group was sampled in a concurrent study and work under a health workforce-funded initiative,<sup>10</sup> as opposed to tertiary education funding (UDRH programmes function as placement facilitators, whereas tertiary organisations function as placement consumers as described above). University staff who participated in the survey were invited to leave their details for subsequent contact to participate in the qualitative interviews. There was no payment or other remuneration offered for participation.

### Data collection

#### Quantitative

The survey instrument was developed based on a scoping review undertaken by the research group to identify evidence of the features of quality rural health student placements.<sup>9</sup> These features were used to create a survey that explored the content from the perspective of university staff in Australia. The purpose of the survey was to determine which features were most or least important for developing a high-quality rural health placement. Once designed, the survey was tested by multiple members of the group and edits made to the wording and flow. Screening questions were required before participants were able to access the survey. The survey contained Likert scale questions, open and closed questions and nominal questions, as well as additional demographic data including employer and role in organisation (see online supplemental file 3). Survey data was collected electronically via Qualtrics, and the survey was designed to take approximately 15–20 min to complete. Survey data was non-identifiable unless a respondent chose to leave their details for a follow-up interview. Following the release of the survey, two follow-up requests were sent to potential participants via email, and the survey was closed approximately 2 weeks after the second reminder was sent out.



## Qualitative

Once a preliminary analysis of the quantitative data was undertaken, the qualitative interview guide was developed. The results of the preliminary quantitative analysis were used to make decisions about which questions should be prioritised for exploration. This was based on the survey results indicating which features were considered most important for placement quality (such as the importance of accommodation and financial support) and further exploring concepts raised in open-ended responses (such as the importance of collaborating with communities). The interviews also helped researchers to further explore some of the survey responses that were incongruent among the respondents, such as whether compulsory allocations to rural placements were important (see online supplemental file 3). The qualitative interviews were semi-structured and were conducted via an online medium (Microsoft Teams) by four members of the research team (MR, LM, JF, EG). Positionality statements for each interviewer are provided in online supplemental file 4, and the interview guide is provided in online supplemental file 3. Only the interviewer and interviewee were present during the interviews which were audio recorded and transcribed. Participants were offered the opportunity to review the transcript of their interview to ensure that their responses were appropriately represented. One participant elected to review their transcript but did not make any amendments.

## Data analysis

### Quantitative data analysis procedures

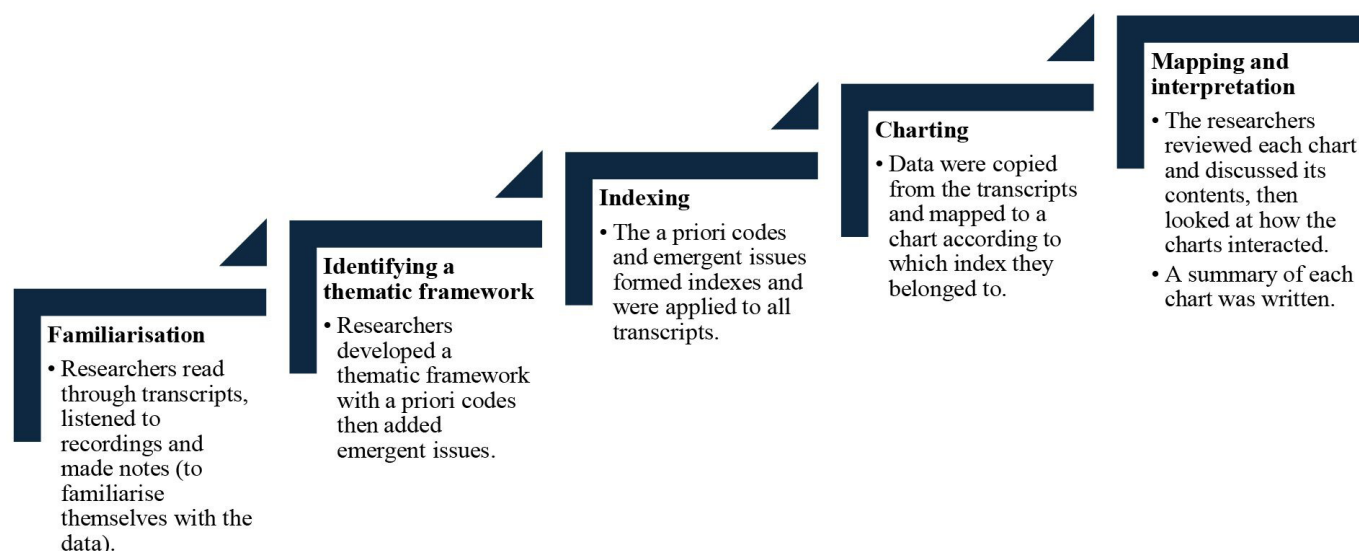
Descriptive data summaries of the survey were performed using SPSS (v29). Due to the sample characteristics and sample size, no assumptions were made about normality. All valid responses to survey items were used in the descriptive summary. Survey data used in the descriptive summaries was non-identifiable. The responses to the five-point Likert scale questions were used to describe

the importance of each feature of placement quality. The features were grouped into the same categories used in the survey and ranked by the number of respondents rating the feature as 'very important'.

### Qualitative data analysis processes

The qualitative analysis undertaken in this study was guided by the Framework approach described by Ritchie and Spencer.<sup>20</sup> Framework was chosen for several reasons, namely, its use as an applied method, ability to be used by a diverse group of researchers from different backgrounds and levels of expertise, its applicability to projects with a limited timescale and allowance for an analysis process that is documented and transparent—thus improving visibility of processes used by a subgroup of the larger research team.<sup>20</sup>, pp. 173-175 Although Ritchie and Spencer<sup>20</sup> describe the process undertaken in the Framework approach in a linear way, it should be noted that when working through the various stages of the methodology, the research team moved forwards and backwards as required, particularly at points of critical discussion. This allowed the team to revisit and change or build on ideas, commensurate with the Framework approach.<sup>20</sup>, p. 177. The process undertaken to conduct the analysis is shown in figure 2 and further explained below.

- Familiarisation with the data: the team who undertook the qualitative analysis (eg, MR, JF, LM) had also conducted the interviews and so were familiar with the interview questions and styles. Each team member had facilitated 2–3 interviews. To familiarise themselves with the dataset, each researcher read the transcripts and/or listened to the recordings of all interviews. During familiarisation, researchers took notes and added them to a shared notebook (which was used throughout the analysis for group reflection).
- Identifying a thematic framework: the thematic framework was drafted based on a scoping review undertaken by the researchers who mapped the features



**Figure 2** Process of qualitative data analysis using the Framework approach.

of high-quality rural health student placements. 16 a priori codes were deduced from this work. Two of the researchers (MR and EG) then applied the a priori codes on two transcripts. This resulted in an additional six emergent issues being added to the framework. Critical discussion was undertaken during this process, and the researchers used the research question to rationalise decision-making (ie, an important part of the process was asking what the data contributed to answering the research question).

- Indexing: the a priori codes and emergent issues were used to form indexes that could be applied to the transcripts. During the next phase of framework development, the four researchers applied the indexes to the entire dataset, with each researcher indexing 2–3 transcripts and checking 2–3 transcripts. The purpose of checking was to ensure that pertinent data was not omitted and to promote discussion about the interpretation of the framework. Any disagreements were resolved through discussion between the two researchers allocated to a transcript or, where there was no agreement, between the entire group. After this stage, there was further modification of the framework due to duplication or redundancy of some of the indexes used. This left a framework consisting of four charts which had been created from the amalgamation of the 12 indexes.
- Charting: each of the four researchers was assigned to a chart and was responsible for building the picture of that chart across the dataset. Data were copied from transcripts into each of the charts with reference to their original location maintained using interview ID and line numbers. Charting was thematic, with each chart including data from any of the participants. Participants (identified by the interview ID number) were kept in the same order on each chart so the data from individuals could be reviewed as readily as data pertaining to each index.
- Mapping and interpretation: the four researchers met, and each presented to the group an outline of the data included in their chart, their notes and reflections. The group critically reflected on the contents of each chart, interactions of the data and meaning. The interpretation of each chart was agreed upon, and each researcher wrote an overview of the data in their chart. These summaries formed the basis of the research results, and quotes were used to exemplify the findings. Each chart represents a theme in the research findings.

Data saturation was not used as an endpoint for recruitment but was considered to have occurred after analysis of the seventh interview, at which point no new indexes were added to the Framework.

### Patient and public involvement

There was no patient or public involvement in this research. The interview participants were able to review

the research transcripts, and the findings of the research will be made publicly available.

## RESULTS

### Descriptive survey findings

The survey was distributed to 478 staff who were able to forward it through their networks. There were 121 survey respondents; however, a response rate was not calculated because the nature of the snowballing recruitment strategy means we cannot be certain how many university staff received the survey. 96 (79%) respondents were academic staff representing roles including clinical educators, lecturers, discipline leads, heads of course, heads of school, fieldwork coordinators and other. 25 (21%) were professional/general/administration staff representing placement officers, research/project staff, unit/subject coordinators and university executives. A breakdown of staff per category is not provided as this would affect anonymity (some disciplines have very small staff numbers per location).

92 (76%) of the respondents worked with one health discipline, and the remainder of the respondents worked with two or more disciplines. The disciplines covered by the entire respondent group included Aboriginal and/or Torres Strait Islander Health practitioner or worker, audiology, chiropractic, dental, diabetic education, dietetics, exercise physiology, medical radiation sciences, medicine, midwifery, nursing, nutrition, occupational therapy, optometry, orthoptics, paramedicine, pharmacy, physiotherapy, podiatry, psychology, social work and speech pathology. Respondents were from 31 Australian universities, seven of whom were classified as regional (defined by membership with the Regional University Network). Respondents most commonly reported working in the jurisdictions of New South Wales/Australian Capital Territory (43%) with representation in the sample from Victoria, Queensland, South Australia, Western Australia, Tasmania, and Northern Territory.

Figure 3 shows the ranking of features of high-quality health student placements from the survey responses. The most important feature was 'personal safety of a student', which was rated as very important or important by 100% of survey respondents. 'Safe and affordable student accommodation' was also rated as very important or important by 100% of respondents. Features related to the supervision of students were also prominent in the top ten features of high-quality placements, including supervisor training and support, interest in supervision and close liaison between the supervisor, student and university. Features related to interprofessional education and student interactions were ranked eighth and 10th overall, with access to high-speed broadband being ninth most important. These findings were used to frame the interview questions, where participants were asked for more details related to why the most important factors may have been rated as such and how they can be achieved. The interviews were also used to explore the reasons some



**Figure 3** Descriptive summary of the features ranked most important.

factors were considered less important, such as student choice to be allocated to a rural placement (see online supplemental file 3 for further information links between survey findings and interview questions).

### Qualitative findings

14 university staff indicated on their survey that they would like to be contacted for the qualitative interviews. Four did not respond to researcher contact, and ten interviews were conducted. The interviews varied in length between 51 and 76 min (mean 58.7 min). All participants identified their gender as female. They worked at ten different universities, and all held academic positions in the disciplines of nuclear medicine, medicine, art therapy, dietetics, physiotherapy, or occupational therapy.

The Framework approach was used to construct four overarching and interrelated themes that constituted the features of high-quality health profession student placements in rural Australia from the perspective of the participants. The themes included building a foundation for engagement with learning, structuring learning to fit in a continuum of education, opportunities to grow clinical skills and professional capabilities in a rural context and co-location and connection as influences for rural learning. The themes are presented below with reference to excerpts from the interview transcripts.

Participants have been given pseudonyms to protect their confidentiality.

### Building a foundation for engagement with learning

High-quality rural placements are founded on the basis that students can engage with content, experiences and opportunities. There are several requirements that are foundational for optimising the ability of students to engage. The participants explained that students require access to accommodation, transportation and financial support to meet the basic requirements for a placement:

First you need to have shelter and food and then you can worry about your approach to patient-centred care. So, in a rural environment, the biggest concern is knowing you've got a comfy enough safe spot to live and that, so those security and accommodation, high quality accommodation and other supports, so that's a very physical support, and not having the stress of other burdens for students. (Remy, physiotherapy)

Participants suggested that student personal circumstances needed to be considered during placement allocation and that they should remain flexible and account for student location, caring responsibilities, disabilities and financial burdens. For some students, this involves consideration of the impact of placement location on



caring responsibilities, which were described by one participant in relation to students being a primary carer for children or ageing parents: “So, it might be ‘I’m looking after my elderly mother, I’m her main carer and there’s nobody else to support and I need to be there to attend her medical appointments,’ or something like that” (Elle, medicine). In addition to the impact of caring responsibilities for access to rural placements, one participant described the personal circumstances that need to be considered for students of diverse cultural backgrounds to achieve high-quality placements:

We are seeing an increase in the number of students in our course who come from a cultural background where (female students are) required to travel with a male, so a placement in a UDRH would be difficult for them, because UDRH accommodation requirements are quite tight, and only available to the student. (Lesley, occupational therapy)

There were several aspects of safety explored within this theme, including psychological safety, cultural safety and physical safety (associated with travelling long distances and fatigue) that were considered as essential foundational determinants for engaging in experiential learning.

...feeling like you’ve got good and safe accommodation where you can cook a meal that you want to cook, or feel safe to go out eat, or know where to go to do that I think is all really important, and I’m not sure how well we’re able to provide that information or those resources for those students... some of these students, some of them have come from different cultural backgrounds where they’ve never left home ... their parents don’t want them to leave for 6 weeks and go somewhere on their own and they have some concerns about how safe they’ll feel there.... (Aubrey, nuclear medicine)

This theme demonstrates that high-quality placement experiences require students’ basic needs to be met.

### Structuring learning to fit in a continuum of education

The provision of high-quality rural placements requires a range of placement stakeholders to consider the continuum of education that occurs across a person’s life while shaping determinants that impact students pre, post and during the placement experience. This involves considering processes to clarify roles and expectations and position placement learning within the degree and considering host site organisational culture.

University discourse around rural placements helps prepare students to undertake rural placements and make the most of the learning opportunities within it, as was described by one academic: “(It is important to) prepare students with expectation of at least one rural placement and communicate to students the value of rural placements” (Billie, nutrition and dietetics). While participants agreed on the value of rural placements for

students, making them mandatory was not necessarily seen as contributing to high-quality learning.

Participants explained that rural high-quality placements are designed to include structured activities, such as early planning and clear performance expectations. Placement orientations should provide clarity around procedures, rosters, staff, contacts and spaces for all stakeholders. This was described by Remy (physiotherapy) as “thorough orientation including expectations, a suitable schedule that includes an appropriate period of observing and assisting before progression to independent practice”.

Participants described high-quality placements as including articulated expectations of a student as a learner more generally. One participant explained how they support students to mentally prepare themselves:

(We say to them), ‘You’re going to need to do [a] 6 months full time placement. I’m talking work 5 days a week, eight-to-four, nine-to-five work hours. That’s, you kind of know (what) you’ve signed up to. It is a good idea to start saving’. (August, dietetics)

Participants outlined that high-quality learning during a rural placement should consider where placement learning sits within the scheme of a degree and into future practice. Having a skilled supervisor and with protected time to support learning was considered important. Some participants explained that supervisors require clarity around student needs and course requirements. One participant described that supervisors need “An orientation to what the teaching is going to be, the programmes, assessments and timetable, introductions to supervisors and other staff... routines and who to report to” (Elle, medicine).

Participants suggested that a high-quality placement is also more likely to occur when students are placed in a host organisation and/or community with a culture that fosters a sense of belonging and welcoming for the learner (in the workplace and community). This can situate the learning within a broader context that considers learning as a holistic experience, described as “a well-structured placement that is welcoming and has information for the student... organised for example, student met at door, orientation to facilities, meet and greet key staff... extra one on one support when needed” (Billie, nutrition and dietetics).

### Opportunities to grow clinical skills and professional capabilities in a rural context

Rural placements were described by the participants as unique learning opportunities that offer exposure to complex cases and build resourcefulness and autonomy. Reduced staffing levels in rural placement sites provide increased access to interprofessional teams and the ability to practice in a more generalist, holistic manner: “(It) helps students know their place in a patient’s journey, and who they need to talk to, to support patients they are seeing” (Casey, nuclear medicine). The general

environment of rural placements, including interprofessional accommodation arrangements, helps students to access interprofessional learning informally, which was viewed as an important opportunity for growth:

Sometimes living in quarters with the other students, so you're chatting with the physio, you're chatting with the speechy... so you're kind of having those conversations around with other students (August, dietetics).

All participants reported high-quality rural placements as those incorporating mechanisms to meet students' learning objectives. In addition to meeting standardised learning objectives, high-quality rural placements were considered to also offer additional learnings considered important to rural and metropolitan contexts, including cultural learning, interprofessional learning and personal development such as reflections on privilege and world view:

Evidence that students experience personal as well as professional development is highlighted by them making their own decisions while they live outside of home and expand their world view... which is more enhanced in a rural setting... Students may be faced with uncomfortable truths on rural placements, such as realising their privilege, and they have to process that. (August, dietetics)

Cultural safety training was viewed as a particularly important additional component of high-quality rural placements, and the participants noted two methods to achieve this learning. The first was to offer cultural safety training as a foundational component of curriculum and the second was to provide place-based and contextualised learning at the placement site:

Cultural safety training in the placement location is pivotal to students being culturally responsive and culturally safe... Students can take learnings from doing cultural safety training to their next job, acknowledging that they may be working in multiple Aboriginal communities. (Jordon, physiotherapy)

This theme demonstrates that high-quality rural placements provide learning opportunities that extend on technical and professional skills to provide an avenue for supported, personal growth.

#### Co-location and connection as influences for rural learning

Connection between the students, supervisors and community members was greatly enhanced by co-location and was described as an important determinant of high-quality placements. Many educational opportunities that occurred outside of the structure of the placement were due to the place-based nature of the placement, as one participant explained, "being immersed in a rural community helps students understand the issues facing the community in a personal way, where they can have

'aha' moments about theories learnt at university applied in real life" (August, dietetics).

The connection between the student and supervisor was viewed as an integral feature of high-quality placements. This connection was fostered by supervisors having time and motivation to share their practice wisdom and clinical knowledge with students. The connection between the student and supervisor was viewed as part of a broader network of interactions that result from and contribute to this relationship. "Close student-supervisor relationships help learning because there is continuity of relationship and of practice" (Aubrey, nuclear medicine). The contextual knowledge of the supervisors was also an important frame for rural learning. Robyn (art therapy) described that "...practice wisdom (of the supervisor) is really important, being able to understand the setting, the context, the client group".

Many participants discussed the importance of collegial relationships between university staff and onsite clinical supervisors for supervisors, who are often geographically isolated, to access education and support in their supervisory role. Participants described how, in high-quality placements, the connection between the university and supervisors was commonly nurtured from afar due to geographical distance: "I think if we really want to practice what we preach about connection and how important that is in rural communities, then I think we as a university need to take the first step" (Elle, medicine).

Participants explained that in high-quality placements, students developed informal connections and social opportunities in rural communities that contributed to the quality of the placement by exposing them to places, experiences and world views. These social opportunities were also described as a way to enhance a students' sense of belonging and open communication pathways across their network of local support:

I do find that if (students) are involved in the local community, they seem to cope better, generally speaking, which means they have a better learning experience. (Jordon, physiotherapy)

Maybe [it's] just the country town vibe ... (but) sometimes we find the students do things with their supervisors and the other practitioners after hours.... (August, dietetics)

#### Integration

Viewed as a whole, the quantitative and qualitative data were consistent in identifying the importance of high-quality supervision and cultural awareness training as features of high-quality rural placements. The quantitative data suggested that safe and affordable student accommodation, financial assistance and personal safety were features of high-quality rural placements, and this was explored in further depth with interview participants who described that these features are fundamental, rather than value-add. The qualitative interviews added nuance to the survey data which identified personal safety



of a student as a feature of quality. The interview participants described why and how personal safety needed to be maintained and added person-centred understandings of the components of student safety that should be considered, such as cultural background.

The qualitative findings of this study that focused on structuring learning to fit in a continuum of education were in agreement with the quantitative data focused on the importance of orientation and structure and added information such as the importance of strengths-based university discourse about rural health. Finally, while the quantitative data suggested interprofessional education and collaborative practice was a feature of high-quality rural placements, the qualitative data added context to how this could occur, suggesting that co-location of students was an informal mechanism for this learning. The qualitative data added information on the importance of co-location for informal connections and social opportunities, which were identified in the survey data but not explained. Overall, there were no divergences or inconsistencies identified between the quantitative and qualitative findings. The interviews provided depth and context to the survey findings and information on how some features of high-quality placements might be achieved.

## DISCUSSION

The findings of this study suggest that, from the perspective of university staff, there are several identifiable features of high-quality rural health student placements. Affordable and safe accommodation, financial support and personal safety were considered fundamental to the quality of health student placements. High-quality supervision (incorporating training and engagement of supervisors), cultural awareness training before and during placements, interprofessional education and close liaison between the student, supervisor and university were considered very important for placement quality. Rurally focused learning opportunities, connecting students to each other and the community, transport and internet access were considered important for placement quality. The interviews suggested that to create high-quality rural health student placements, the continuum of an individual's education should be considered, and co-location and connection are important facilitators of many of the features of high quality. These findings demonstrate there are specific features that can be incorporated in the design, delivery and evaluation of rural health student placements as a unique opportunity to contribute to tertiary education. The study results are congruent with the findings of the scoping review,<sup>9</sup> which was used as a platform on which to build this research programme, and add nuance to understandings of high-quality rural placements, as well as further information on how they can be achieved. The features of high quality suggested in this study can be operationalised in the delivery of these

programmes in a way that is contextually relevant to the host rural community.

This study has contributed to the literature by adding the perspectives of university staff to the extensive amount of work that has focused on the perspective of students, demonstrated in a recent systematic review by Eady *et al.*<sup>21</sup> The work of Eady *et al.*<sup>21</sup> aligns with our current study as both found university staff and students felt that for placements to be high quality, they need to meet the learning needs of the student and contribute to the development of skills, knowledge and personal attributes. There was also agreement that student safety (physical, psychological and cultural) contributes to quality and that clear roles, expectations and organisation and coordination between stakeholders were important. Supportive relationships between supervisor and student were identified as important by Eady *et al.*<sup>21</sup> and our study, although students did not mention a requirement for supervisor training. Similarly, the university staff interviewed in our study discussed Aboriginal and Torres Strait Islander cultural training and interprofessional education and collaboration as important features of quality, which was not a finding in Eady *et al.*'s<sup>21</sup> systematic review.

Other notable differences when comparing the findings from Eady *et al.*'s<sup>21</sup> systematic review of student perspectives to that of university staff explored in our study are that students placed importance on the way they were assessed and the marks they received. This was not mentioned by university staff and perhaps indicates different roles and desired outcomes in the enterprise of student placements. Students also mentioned the effect that personal attributes of the student had on quality, indicating that they required initiative, positivity and agency. In both studies, there was recognition of the impact on the quality of student circumstances, including financial, social and cultural position. Students also mentioned the importance of feeling that they had made an impact during their time. Students wanted an authentic experience and wanted to be able to see themselves in a similar role in the future,<sup>21</sup> whereas this was not an identified feature of quality in our study. These findings suggest that it is important to view quality from multiple viewpoints as there are key differences in the perspectives of key stakeholders, such as university staff and students.

Our study identified that safety during rural health student placements was considered fundamental to high quality, as demonstrated by 'student personal safety' and 'safe and affordable accommodation' being considered important or very important by 100% of participants. These factors encompass all aspects of safety, including physical safety and security, psychological safety and social well-being. The Australian Universities Accord Final Report has highlighted the importance of student welfare, safety and well-being to the overall student experience, stating that higher education institutions must ensure that all learning environments are safe, welcoming and inclusive.<sup>22</sup> This study's findings regarding the importance of meeting students' needs so that they can engage

with learning during their placement are supported by the literature. Students can only engage in learning through placements if their requirements for safety, security, belongingness, self-concept and learning are met.<sup>23</sup> Therefore, suitable, secure, affordable and conveniently located accommodation must be available for students on rural clinical placements.<sup>24 25</sup> Considering recent attention on placement poverty in Australia, the provision of free or subsidised accommodation has become particularly important, as it may alleviate stress and anxiety for students who experience a loss of income during their unpaid placement.<sup>26</sup>

In the last 15–20 years, the demographic profile of Australian students has evolved and now includes higher proportions of mature-aged students, Aboriginal and Torres Strait Islander peoples, students from low socio-economic backgrounds, students with a disability and people from regional, rural and remote areas. Further, health profession courses may have higher proportions of students from culturally and linguistically diverse backgrounds.<sup>22 27</sup> Students with diverse backgrounds can face additional social and cultural barriers to participating in rural clinical placements, which may include caring for children or parents or religious practices. Students may be perceived to be ‘different’ by others or perceive themselves to be different, which can negatively impact student clinical placement experiences.<sup>28</sup> As this study’s findings demonstrate, students with culturally diverse backgrounds may face additional challenges engaging in placements due to communication and language barriers, discrimination and racism.<sup>27 28</sup> Considering these changes in tertiary students’ demographics and our findings that point to the importance of person-centred understandings of student needs, there is a need for future research to further explore this area and understandings of ensuring student safety during placement.

Our findings highlight the importance of partnerships between universities, students and supervisors to achieve high-quality placements. University staff described two important roles in these relationships. The first was to communicate clearly to the students the value of rural placements to current student learning and for future career options, which aligns with previous work by Ross *et al.*<sup>29</sup> The second role was to develop relationships with placement supervisors and to communicate the expectations of the rural placement in the context of curricula and the students’ learning journey. Further expectations of universities were to provide student supervision training to supervisors and to offer ongoing support to supervisors during the placement. Developing relationships involves regular communication to clarify objectives and roles<sup>30 31</sup> and, although challenging across geographically dispersed rural areas, can be assisted by modern communication technology.<sup>30</sup> While the importance of these partnerships has been highlighted in previous research,<sup>32–35</sup> there is a need for further work to explore processes and resources required for the creation of strong, collaborative partnerships between multiple stakeholders. The role

of rural communities as a stakeholder in placements has yet to be fully explored and presents an opportunity for future work.

This national multidisciplinary study is one of the first to explore determinants of high-quality rural health student placements from the perspective of university staff, a largely missing stakeholder in existing research.<sup>9</sup> It provides a wider perspective in comparison with previous research, which has been largely focused on perspectives of students or supervisors, specific placements or specific geographical areas.<sup>11 36</sup> Views of participants from 31 Australian universities across 22 health disciplines increase the applicability to a wider audience. The explanatory sequential mixed methods design used the preliminary analysis of quantitative findings to inform the interview guide for the qualitative analysis. This allowed for deeper exploration and responsiveness, including further interpretation and integration of all data following the qualitative analysis.

The study does have limitations. While the snowballing recruitment method allowed distribution of the survey to a wide audience, it is not possible to determine how many university staff received the survey and to calculate a response rate. Publicly available details for university staff obtained through university websites may have been out of date. In addition, the choice to forward the survey remained with the university staff initially contacted, and therefore, key personnel may not have received the survey. The snowballing recruitment method may have introduced sampling bias as respondents were likely to forward the survey to those who had similar priorities or work functions. Participants for the interviews were drawn from the survey respondents, meaning participants needed to have completed the survey to be eligible for an interview. This may have limited the sample size and selection. Selection bias may be present in the study, with participants who volunteered for interviews being more likely to have strong or positive views about rural placements. The interviews were conducted by researchers who identify as females, and all interviewees also identified as females. This may have impacted the results of the study. While limitations may impact generalisability, the research informs future directions for research about high-quality rural health student placements.

This study has several implications for policymakers and education institutions. Policymakers should consider the importance of ensuring affordable and safe accommodation for students during their placements. They should also promote policies that support co-location of students and facilitate connections between students and the local community to enhance the quality of placements. Adequate resourcing should be considered so that students have access to reliable transportation and internet services during their placements. This may involve partnerships with local transport providers and investment in digital infrastructure. Universities should establish clear guidelines for regular communication and liaison between students, supervisors and university

staff to ensure cohesive and supportive placement experiences. They should prioritise initiatives to help students integrate into the rural community, fostering a sense of belonging and engagement. Universities should also consider how they empower high-quality supervision through the provision of ongoing professional development and engagement strategies.

## CONCLUSION

This study highlights several key features that contribute to high-quality rural health student placements from the perspective of university staff. Fundamental features such as safe and affordable accommodation, financial support and personal safety are crucial for ensuring that students can fully engage with their learning experiences. High-quality supervision, cultural awareness training and opportunities for interprofessional education and collaboration are also essential components that enhance the overall quality of placements. The findings underscore the importance of considering the continuum of education and the role of co-location and connection in fostering meaningful learning experiences. By integrating these features into the design, delivery and evaluation of rural health student placements, universities can better support students and contribute to the development of a skilled and resilient rural health workforce. Future research should continue to explore the perspectives of various stakeholders to further refine and improve the quality of health student placements in rural settings.

## Author affiliations

<sup>1</sup>Charles Sturt University, Wagga Wagga, New South Wales, Australia

<sup>2</sup>Western Australian Centre for Rural Health, The University of Western Australia, Karratha, Western Australia, Australia

<sup>3</sup>Department of Rural Health, The University of Melbourne, Shepparton, Victoria, Australia

<sup>4</sup>Rural and Remote Health, Flinders University, Darwin, Northern Territory, Australia

<sup>5</sup>Department of Rural Health, The University of Newcastle, Taree, New South Wales, Australia

<sup>6</sup>La Trobe Rural Health School, La Trobe University, Wodonga, Victoria, Australia

<sup>7</sup>James Cook University, Mount Isa, Queensland, Australia

<sup>8</sup>La Trobe Rural Health School, La Trobe University, Bendigo, Victoria, Australia

<sup>9</sup>Western Australian Centre for Rural Health, The University of Western Australia, Geraldton, Western Australia, Australia

**Acknowledgements** The authors would like to thank Rebecca Barker for her continuous administrative support with the research. We would also like to acknowledge the contributions of Dr James Debenham and Dr Jodie Bailie.

**Contributors** Substantial contributions to the conception/design of the work: EG, CQ, LM, RR, MR, LF, LS and CS. Substantial contributions to acquisition of data: EG, CQ, LM, RR, MR and JF. Substantial contributions to analysis or interpretation of work: EG, CQ, LM, RR, MR, JF and LS. Drafting the work and reviewing it critically for important intellectual content: EG, CQ, LM, RR, MR, JF, LS, CS, KF and CT. All authors approved the final manuscript and agreed to be accountable for all aspects of the work. The lead author EG is the guarantor.

**Funding** This study received funding from the Australian Rural Health Education Network. This work was supported by the Australian Government Department of Health Rural Health Multidisciplinary Training Program.

**Competing interests** None declared.

**Patient and public involvement** Patients and/or the public were not involved in the design, conduct, reporting or dissemination plans of this research.

**Patient consent for publication** Not applicable.

**Ethics approval** This study involves human participants. Overarching ethical approval for this research was granted by the University of Melbourne Human Ethics Committee (2022-23201-33373-5). Additional approvals were received from the following universities where the research team members are employed; University of Western Australia (2022/ET000770), University of Newcastle (H-2022-0353), Flinders University (5724), La Trobe University (022-23201-32675-3), Charles Sturt University (H22398), University of Notre Dame 2022-145) and James Cook University (H8934). Participants gave informed consent to participate in the study before taking part.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** No data are available. Data generated by this research are not available due to ethics requirements and the small sample size.

**Supplemental material** This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: <http://creativecommons.org/licenses/by-nc/4.0/>.

## ORCID iDs

Elyce Green <http://orcid.org/0000-0002-7291-6419>

Rohan L Rasiah <http://orcid.org/0000-0003-3798-822X>

Claire Quilliam <http://orcid.org/0000-0002-7344-0133>

Leigh Moore <http://orcid.org/0000-0001-6106-1120>

Jane Ferns <http://orcid.org/0000-0001-9551-3869>

Lyndal Sheepway <http://orcid.org/0000-0001-5133-5714>

Carolyn Taylor <http://orcid.org/0000-0001-6034-0427>

Kathryn Fitzgerald <http://orcid.org/0009-0009-4426-8619>

## REFERENCES

- 1 Nursing and Midwifery Board Australia. Fact sheet: Scope of practice and capabilities of nurses, 2024. Available: <https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/FAQ/Fact-sheet-scope-of-practice-and-capabilities-of-nurses.aspx>
- 2 Penman M, Raymond J, Kumar A, et al. Allied Health Professions Accreditation Standards for Work Integrated Learning: A Document Analysis. *Int J Environ Res Public Health* 2023;20:6478.
- 3 Student placements: Australian Government. Fair work ombudsmen, Available: <https://www.fairwork.gov.au/starting-employment/unpaid-work/student-placements>
- 4 Baerheim A, Raaheim A. Pedagogical aspects of interprofessional workplace learning: a case study. *J Interprof Care* 2020;34:59–65.
- 5 Billett S, Choy S. Integrating professional learning experiences across university and practice settings. In: *International handbook of research in professional and practice-based learning*. 2014: 485–512.
- 6 Tynjälä P. Perspectives into learning at the workplace. *Educational Res Rev* 2008;3:130–54.
- 7 White D, Jones D, Harvey P, et al. Competition or collaboration in regional Australia? A cross-border and multi-university approach to maximising rural health investments, community health and health workforce outcomes. *Aust J Rural Health* 2022;30:823–9.
- 8 Walsh SM, Versace VL, Thompson SC, et al. Supporting nursing and allied health student placements in rural and remote Australia: a narrative review of publications by university departments of rural health. *Med J Aust* 2023;219 Suppl 3:S14–9.
- 9 Green E, Quilliam C, Sheepway L, et al. Identifying features of quality in rural placements for health students: scoping review. *BMJ Open* 2022;12:e057074.
- 10 Australian Rural Health Education Network. About University Departments of Rural Health 2024, Available: <https://arhen.org.au/for-health-students/about-udrhs>



- 11 Craig PL, Phillips C, Hall S. Building social capital with interprofessional student teams in rural settings: A service-learning model. *Aust J Rural Health* 2016;24:271–7.
- 12 Hosken N, Loughton J, Goldingay S, *et al.* rotational social work field placement model in regional health. *Advances in Social Work and Welfare Education*. 2016;18:72–87.
- 13 Jones D, McAllister L, Dyson R, *et al.* Service-learning partnerships: Features that promote transformational and sustainable rural and remote health partnerships and services. *Aust J Rural Health* 2018;26:80–5.
- 14 Jones D, McAllister L, Lyle D. Stepping out of the shadows: Allied health student and academic perceptions of the impact of a service-learning experience on student's work-readiness and employability. *JTLGE* 2015;6:66–87.
- 15 Johnson G, Blinkhorn A. Faculty staff and rural placement supervisors' pre- and post-placement perceptions of a clinical rural placement programme in NSW Australia. *Eur J Dent Educ* 2013;17:e100–8.
- 16 Shannon-Baker P. Philosophical underpinnings of mixed methods research in education. In: Tierney RJ, Rizvi F, Ercikan K, eds. *International encyclopedia of education*. Oxford: Elsevier, 2023: 380–9.
- 17 Quilliam C, Green E, Rasiah RL, *et al.* University staff perspectives on determinants of high-quality health professions student placements in regional, rural and remote Australia: protocol for a mixed-method study. *BMJ Open* 2024;14:e077079.
- 18 Creswell JW, Creswell JD. *Research design: qualitative, quantitative, and mixed methods approaches*. 6th edn. Thousand Oaks: SAGE, 2023.
- 19 Australian Qualifications Framework Council. Australian Qualifications Framework: Australian Government Department of Education, 2013. Available: <https://www.aqf.edu.au/publication/aqf-second-edition>
- 20 Ritchie J, Spencer L. Qualitative data analysis for applied policy research. In: Bryman A, RG B, eds. *Analyzing qualitative data*. Routledge, 1994: 173–94.
- 21 Eady MJ, Drewery D, Burney M, *et al.* Students' reflections of quality (RoQ) in work-integrated learning (WIL): a systematic review and framework. *HESWBL* 2025;15:222–39.
- 22 Australian Government. Australian Universities Accord: Final Report. 2023.
- 23 Levett-Jones T, Reid-Searl K. *The clinical placement-E-Book epub: an essential guide for nursing students*. Elsevier Health Sciences, 2022.
- 24 Fatima Y, Kazmi S, King S, *et al.* Positive placement experience and future rural practice intentions: findings from a repeated cross-sectional study. *J Multidiscip Healthc* 2018;11:645–52.
- 25 Bradley DM, Bourke L, Cosgrove C, *et al.* Experiences of Nursing and Allied Health Students Undertaking a Rural Placement: Barriers and Enablers to Satisfaction and Wellbeing. *AIJRE* 2020;30:51–63.
- 26 William S, Hegazi I, Peters K. *Navigating workforce uptake, retention, and placement poverty amid cost of living challenges in Australia*. Taylor & Francis, 2024:327–30.
- 27 O'Reilly SL, Milner J. Supporting culturally and linguistically diverse students during clinical placement: strategies from both sides of the table. *BMC Med Educ* 2015;15:175.
- 28 Koch J, Everett B, Phillips J, *et al.* Is there a relationship between the diversity characteristics of nursing students and their clinical placement experiences? A literature review. *Collegian* 2015;22:307–18.
- 29 Brian MR, Erin C, David G. Remote and rural placements occurring during early medical training as a multidimensional place-based medical education experience. *Educ Res Rev* 2020;15:150–8.
- 30 Häggman-Laitila A, Rekola L. Factors influencing partnerships between higher education and healthcare. *Nurse Educ Today* 2014;34:1290–7.
- 31 Buys N, Burnsall S. Establishing university–community partnerships: Processes and benefits. *J Higher Educat Policy Manage* 2007;29:73–86.
- 32 Campbell M, Russell L, McAllister L, *et al.* *A framework to support assurance of institution-wide quality in work-integrated learning: final report*. Australia, 2019.
- 33 Cream L, Manners P. *The engaged university: Turning words into action*. 2020.
- 34 Fleming J, McLachlan K, Pretti TJ. Successful Work-Integrated Learning Relationships: A Framework for Sustainability. *Int J Work-Integrated Learn* 2018;19:321–35.
- 35 Green E, Barry R, Lawrence J, *et al.* Building sustainable partnerships and managing expectations of work-integrated learning stakeholders. In: Zegwaard KE, Pretti J, eds. *The routledge international handbook of work-integrated learning*. London: Routledge, 2023: 395–412.
- 36 Jones D, McAllister L, Lyle D, *et al.* Interprofessional Academic Service-Learning in Rural Australia: Exploring the impact on allied health student knowledge, skills, and practice. A Qualitative Study. *IJPBLHSC* 2015;3:1–16.