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Original Research

The 'why' and the 'who' of choosing a rural Longitudinal Integrated Clerkship: medical graduates' perspectives from a qualitative study

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Abstract

Introduction: Rural Longitudinal Integrated Clerkships (LICs) have been shown to produce graduate doctors who are more likely to work rurally than those from other clinical training pathways. The student selection and admission process to rural LICs is a relatively unexplored area. To address this knowledge gap, rural LIC graduates' perceptions on participating in the program and the medical students most suited to an LIC were explored. Enhanced understanding of selection and admission processes could provide procedures to optimise student success and wellbeing in rural training environments. Additionally, it could ensure student selection aligns with the program goal and help build targeted strategies to select and train medical students for rural practice.

Methods: An exploratory qualitative study was undertaken. Participants were graduates of the Doctor of Medicine at Deakin University, Australia, who participated in the rural LIC and graduated between 2011 and 2020. Semi-structured qualitative interviews were undertaken, and reflexive thematic analysis was employed.

Results: A sample of 39 graduates participated. Two main themes were identified: selecting and selection. The 'why' (selecting) referred to perceptions on clinical school preferencing decisions, with associated subthemes of *being at the centre*, *aspiration*, *size*

matters and *being disrupted*. The 'who' (selection) referred to the type of student most suited to thrive in the clerkship, with associated subthemes of *adaptive learner*, *relationship builders*, *harnessing life experiences* and *familiarity with rurality*.
Conclusion: The linking of the 'why' and 'who' has the capacity to ensure that the most suitable students are selecting and selected to undertake a rural LIC. This has benefits for students' personal learning, but also for medical schools with an interest in building effective training models that integrate selection policies with intended outcomes of the program, which often include to graduate doctors who work rurally.

Keywords

Australia, Longitudinal Integrated Clerkship, medical education, medical student, qualitative research, rural immersion, rural medical workforce, selecting, selection.

Introduction

Longitudinal Integrated Clerkships (LICs) are a well-described medical education model that delivers education in low-resource settings and successfully trains doctors more likely to work in rural areas upon graduation[1-4]. The benefit and uniqueness of this clerkship are that it immerses students longitudinally in a clinical environment, whereby they undertake continuous learning from supervisors, peers and patients, achieve core clinical skills in an integrated manner and foster relationships between all parties[5-9]. Internationally, LICs have been growing in popularity, with programs being predominantly implemented in the US, UK, Australia, Canada, South Africa and New Zealand[10-12]. The combination of continuous learning and active engagement in patient care is thought to be important in encouraging students to take up careers in low-resource settings, where there is often a maldistribution in the medical workforce[10]. Therefore, every effort should be made to ensure that appropriate students select and participate in the clerkship.

Entry into an LIC follows either selection or mandatory entry, with most programs following a selection approach[7,8]. Selection occurs via a variety of means including preferencing, random allocation and competitive entry[2]. A limited number of programs have capacity for and mandate the entire cohort to undertake an LIC, with only six meeting the 'all LIC' criteria in 2022[9]. The majority of programs can accommodate only a small number of students from the overall cohort[2,7,9]. As rural LICs have a strong emphasis on preparing graduates for rural medicine, understanding how and if elements such as selection policies are linked to the program's desired outcomes is of critical relevance.

From the available literature, there is a lack of consensus on selection criteria based on student characteristics that would be most suited to a rural LIC[7]. A common measure highlighted was students' academic records, yet there was a variation in how this measure was employed[7]. Alternatively, previous quantitative studies have investigated the characteristics of an LIC cohort or perspectives on learning profiles that are ideal for LIC candidates, rather than the most suitable candidates to achieve the program's goals[13-15]. Konkin and Suddards advocated that all medical students should actively consider a rural LIC, self-assessing if it is the right fit for them[15]. Elements for consideration were the ability to make the most of the experience by engaging with the wider community, being adventurous and motivated, and being comfortable with unpredictability[15]. While these results provide a rationale for selection, a study limitation is that participants were students who wanted to attend the LIC and may have had a pre-existing preference to be involved and therefore were more engaged. We offer a different perspective because (1) our participants were graduates rather than students, who with time and experience as medical practitioners can offer unique insights into aspects of selecting and selection; and (2) our graduates had a range of LIC participation preferences ranging from selecting or being mandated to attend the rural LIC.

Understanding why students choose to undertake a rural LIC is important to support the aspirational goal of voluntary recruitment into the program, which has been linked to positive workforce outcomes[16]. Previous literature has demonstrated that students self-select rural LICs for clinical, educational and rural life experiences, and for personal and professional growth and development[17-21]. Conversely, these reasons also apply for non-self-selection, with the fear of missing out on clinical opportunities, housing, distance and social isolation from friends and family all acting as barriers to participation[17-20]. Understanding self-selection reasons in further detail and providing linkages to the type of student best suited to undertake a rural LIC has not been undertaken and offers a distinct perspective that may inform selection policies and recruitment strategies. In addressing this, the present study aimed to explore rural LIC graduates' preferencing decisions and who graduates thought would be best suited as a learner to undertake a rural LIC.

Methods

This study is part of a wider research project that examined aspects of a rural LIC that influenced medical graduates' career decisions. Data collection methods have been previously published in detail[22]. Briefly, a qualitative study was undertaken using semi-structured interviews with medical graduates from a rural LIC. The interview guide and iterative methodology allowed for a range of topics to be explored within one interview.

Qualitative approach

We conducted this study using a reflexive thematic analysis method. Reflexive thematic analysis was selected as it embraces a researcher's interpretive engagement with the data, coupled with coding that is open and organic, with no coding framework used to develop themes[23,24]. The reflexive thematic analysis reporting guidelines were used to guide the reporting of research findings[25].

The research question

To understand participants' selection decisions, an interview guide was developed. Questions in the guide included, 'What influenced your clinical school preferences?' with associated prompts of why they may or may not have wanted to undertake a rural LIC placement, what was their preference and reflections on preferences.

To explore who graduates thought should undertake a rural LIC, participants were asked, 'Do you think some students are more suited to a rural LIC?' with associated prompts of who they thought was suited to undertaking a rural LIC and why they thought some students were more suited to a rural LIC than others.

Deakin University context

Deakin University, as part of its 4-year Doctor of Medicine, offers a 1-year comprehensive LIC in rural western Victoria, Australia (Modified Monash (MM) model categories MM 3–5)[10,26,27]. The clerkship occurs during the penultimate year of the degree. During year 2, students submit their clinical school preferences for years 3 and 4. The rural LIC (Rural Community Clinical School, known as IMMERSE before 2016) is one of five options, including two metropolitan (MM 1) and 2 rural (MM 2 and MM 3) clinical schools (Fig1). Non-LIC clinical schools are traditional block rotations. While there is a commitment to try to ensure students are allocated their preferred clinical school, this cannot be guaranteed due to capacity constraints, and students may be allocated a lower preference. All clinical schools have a maximum number of students they can accommodate each year, with the LIC having capacity for approximately 20 students per year.

Figure 1: Map of Deakin University clinical school locations, Victoria, Australia.

Participants, recruitment and sample size

Participants were purposively sampled from Deakin University School of Medicine's rural LIC program (graduates in 2011–2020). As reflexive thematic analysis was employed, a predetermined sample size was not appropriate; rather, the final sample was guided by information power, which was determined by the aims, generation of data and analysis[28,29]. Participants were recruited by text message for opt-in consent to participate, with a link to a Qualtrics survey (Qualtrics; https://www.qualtrics.com/en-au/ [https://www.qualtrics.com/en-au/]) to provide demographic data and consent to be contacted for a qualitative interview.

Data collection

Semi-structured qualitative interviews were completed between February and November 2022. Interviews were completed iteratively, initially recruiting graduates for 2017–2020, then for 2014–2016 and finally for 2011–2013. Interviews with individual participants were completed by telephone, audio-recorded and transcribed verbatim. Interview duration was 20–53 minutes, with a mean time of 33 minutes. Participants were offered an A$150 Mastercard as reimbursement for their time.

After each interview, the interviewers (JB, MJB) participated in informal debriefings, allowing for reflection on participant responses to questions and whether any additional questions or prompts were required. Interviewer bias and depth of probing during interviews were also discussed as part of a reflexive approach[30-32]. A reflexive statement is available in Appendix I.

Data analysis

Demographic data obtained through the recruitment survey were used to describe the sample of participants. Data were imported into Microsoft Excel for collation.

Transcribed interviews were uploaded into NVivo for Windows v12 (Lumivero; https://lumivero.com/products/nvivo [https://lumivero.com/products/nvivo]) to supplement analysis. Reflexive thematic analysis was undertaken. This analysis was conducted through a relativist, constructionist paradigm. This means that analysis focused on unpacking understanding from within the dataset, with the researcher's subjectivity acknowledged and deemed integral to the process[23,33]. This involved inductive data coding to identify unique and recurring patterns that highlighted participants' perceptions of selecting or being selected for a rural LIC year[23,31,33]. Coding was conducted independently (MJB, JB), with frequent meetings during this stage to discuss consistency and theme development, and any differences resolved by recoding or combining themes.

After coding was complete, the entire research team (MJB, JB, HB, LF) met to discuss themes and their meaning.

Ethics approval

Ethics approval was obtained from Deakin University Human Ethics Advisory Group (HEAG-H 172_2021).

Results

A total of 170 graduates were contacted, with 39 consenting to participate in the study. Participant demographic data is presented in Table 1. Participants' willingness to participate in the rural LIC was captured narratively during the interviews. Participant preferences ranged from preferencing the program first through to last (Table 1). Analyses of qualitative responses led to the development of two main themes, including: the 'why' (selecting) and the 'who' (selection), with associated subthemes.

Table 1: Demographic details of Deakin University Longitudinal Integrated Clerkship participants (*n*=39)

Variable	Characteristic	*n* (%)
Gender	Male	18 (46.2)
	Female	21 (53.8)
Age group (years)	≤30	5 (12.8)
	30–34	18 (46.2)
	35–39	12 (30.8)
	>40	4 (10.2)
Preference for rural LIC placement	Preferenced[†]	19 (48.7)
	Allocated[¶]	14 (35.9)
	Not disclosed[§]	6 (15.4)

[†] Participants who nominated the LIC as their first preference.
[¶] Participants who nominated the LIC as a lower preference and were allocated to the program.
[§] Participants who were unable to recall or did not disclose during interview.
LIC, Longitudinal Integrated Clerkship.

Selecting: the 'why'

Participants described the reasons underpinning their clinical school preferencing decisions and reflected upon these reasons to describe why a medical student may or may not select to participate in a rural LIC. Themes related to *being at the centre*, *aspiration*, *size matters* and *being disrupted*.

Being at the centre

The types of learning experiences on offer at the LIC sites were considered by participants when preferencing clinical schools. Participants were seeking learning experiences that had both a high level of hands-on learning and individualised learning or one-on-one support of supervisors, which enabled the student to be at the centre of their learning.

Perceptions surrounding the types of exposure and ability to actively participate in a range of clinical activities were key reasons why participants wanted to undertake the LIC. This hands-on experience was facilitated by the breadth and repeated exposure to clinical scenarios, access to patients and program flexibility.

> *Advantages of the rural program it is a very hands-on year and I guess that comes down to the fact that you're, you know one of … one or two medical students … and so, when an opportunity comes up that they [supervisors] think is good learning, it can be a case of, oh, you know, somebody needs a catheter, you should do it … lots of opportunity for procedural experiences. (participant 9, preferenced)*

Active participation was facilitated by one-on-one supervision. This was linked to the absence of multiple levels of learners all vying for hands-on learning experiences and the ability for supervisors to provide individualised training that aligned with participants' learning needs. Participants contrasted this aspect positively against both their own subsequent training experiences and those they witnessed within current medical education (some now being supervisors), where there is often a hierarchy of medical trainees competing to gain hands-on experience, and medical students are at the bottom.

> *And I guess the people, the doctors … know you a bit better and have more time or can better target your learning, which I think is good. (participant 21, not disclosed)*

Aspiration

Previous student recommendations were a pivotal source of information for students considering a rural LIC placement. Positive endorsements were particularly influential when they came from doctors whom students held in high regard and viewed as aspirational role models.

> *I've spoken to a lot of IMMERSE alumni who had a really great time. And who were really great interns, and residents. And so, I think that role modelling really helped me choose to go into IMMERSE. (participant 36, preferenced)*

Size matters

The overall cohort size and geographic dispersion of the LIC were preferencing considerations. Notably, many participants were apprehensive of the small cohort size at sites, and about possible social isolation. However, for some participants, there was a connection between the small student cohort and their learning preferences. Participants who preferred to study alone or in smaller, more supportive groups found that the LIC enhanced their learning. They described that being geographically removed from the main cohort reduced their stress levels and perceptions of academic competitiveness.

> *I think this … one strength I could see as well was that you're not comparing yourself with other people because it was just you in that town … I wonder whether if I was in [other metropolitan clinical site] would I be hearing more about this and that, and that was stressing me out like, because there's more people telling [you] what they're studying what they're doing and then you might feel a bit inadequate. (participant 20, allocated)*

Conversely, some participants missed being part of the larger medical cohort, fearing that they were missing both collegial moments and learning opportunities. Others described challenges

of reintegrating into the larger cohort in year 4, where there were already well-established group dynamics.

> *I just didn't really have that at all [camaraderie]. And I sort of envied those, at you know, [metropolitan hospital], say, who, as a student, you know, they were part of a rotation. And within that rotation, they were part of a small team. And within that team, you know, they were one of a handful of students, and they had their intern, and they had a registrar. And they … ward rounded with the consultant. And they, they all got coffee together after the ward round. And they would, there would be impromptu teaching and opportunities to sort of ask questions and, and I guess that learning on the job, but also feeling like you're, you're really a part of something. I didn't get that at all. (participant 9, preferenced)*

Being disrupted

Participants described not wishing to participate in the program due to the perceived disruption it may cause to their personal lives, particularly in terms of being geographically distanced from their homes, family and friends. The need to relocate to a rural community was often met with apprehension and fear of academic and social isolation. In some cases, participants commuted long distances on weekends to see partners, family and friends, with this disrupting their ability to build meaningful connections in their rural LIC community.

> *But it was just so far away. I think that was my biggest concern because I guess having family interstate and things. Even just a drive back to [metropolitan location] was, like expensive in petrol. So, I just knew it was going to be really isolating. (participant 14, allocated)*

This apprehension was further exacerbated in some participants who already had relocated upon entry to medical school. They felt they had just settled into their new community and that moving again to attend the LIC would be a significant disruption to their lives.

> *A couple years earlier I'd just moved from [country location] and left my whole life, all my friends, my boyfriend, everything behind and so then being taken out of [metropolitan location] where I'd started to make new friends and everything and then placed in [IMMERSE town] was really unsettling and yeah, I was really upset about it. (participant 15, allocated)*

The participants who described being connected to the rural community often became involved in community groups, remaining over weekends, and were overall less disrupted by moving.

> *I felt like the community was really welcoming and friendly. I think like both of our supervisors tried to … make us feel welcome. If there was anything going on in town, we got invited … And then just even the clinic, like I've made friends with some of the nurses, some of the reception staff who I'm still in contact with. Like, I really do feel like the community made us feel welcome and people knew who you were as well … And I probably should say, as well as part of my GP training, I actually chose to go back to … back there for a year as well. And I feel like that was really because of my IMMERSE experience. (participant 35, preferenced)*

Selection: the 'who'

Who should undertake the clerkship was based on who graduates believed would thrive both academically and personally in a rural LIC environment. In some cases, this was strongly linked to why some participants preferenced the LIC highly. Participants overwhelmingly felt there were students more suited to the clerkship than others. Learning preference and personal circumstances were key considerations, with participants stating it was sometimes easier to identify the students who were not suited to the program than those who were. Four subthemes were identified: *adaptive learners*, *relationship builders*, *harnessing life experiences* and *familiarity with rurality*.

Adaptive learners

Adaptive learners are those who can adapt their approach to learning through adjusting for the context that they are learning within. In the context of this study, this meant participants needed to be able to become active learners adapting their learning to the rural context and also seeking out learning opportunities to flourish. Participants were able to outline the qualities they thought were beneficial to be successful and thrive in a rural LIC. Overwhelmingly, participants thought rural LIC students needed to be self-directed learners. A self-directed learner was described as someone comfortable with the flexible curriculum delivery, which was deemed less prescriptive and didactic than traditional block rotations. Students who could proactively navigate a less formal structure and seek out their learning opportunities were deemed appropriate candidates who could thrive within the LIC.

> *I can see how the program would be difficult, because … the bigger clinical schools have much more regimented schedules, where you have lots of tutorials, and then you're going here at this time, and there at this time, whereas for us, like we had a very open schedule. And, you know … I could see how, particularly if you've come from a background that's always been pretty regimented, that you can struggle with your ability to self-program. Now, I think that's a good thing about the program. And I wouldn't change it, because I think I liked that aspect to it. But I think I can see how there would be certain types of people that might struggle with that. (participant 7, preferenced)*

Participants who preferred a more structured timetable required adaptations to their learning approach. On occasion they described it as overwhelming because they were fearful that they would not satisfy all the course requirements.

> *It was pretty hard you're sort of left a little bit like what have I missed, what areas am I lacking in, whereas I think you do the blocks and you do one block and you tick it off and you move on and you know that's put into discrete modules and in your mind your confident to know you've got everything ticked off. Whereas I suppose at the end for us maybe we were scrambling a little bit to make sure that we'd actually seen enough that we had devoted enough time to each of the topics, but once again that just comes back to being a bit more independent. (participant 16, allocated)*

Relationship builders

Participants described that students needed to develop relationship-building skills to thrive in a rural LIC.

And personally, I think thriving in the RCCS [Rural Community Clinical School] environment relies on you building relationships with other health professionals. In the larger clinical schools, many opportunities are handed to you on a platter. (participant 1, preferenced)

There were different types of students who could build these relationships. Self-described introverts felt the clerkship suited them as they had extended time to develop relationships with supervisors and clinical teams, rather than feeling pressured to make a good first impression in a larger group environment. It forced them to become known, rather than their previous lived experiences of feeling or trying to be anonymous when part of larger cohorts. Being known enhanced learning opportunities and a growth in confidence, and allowed participants to thrive in the LIC.

I feel like I really liked it [the LIC] because I'm quite introverted. But like, also, I, like I lived on my own … But I liked it because I was … on my own in this town and got to … not make my own program, but like, I didn't have the same sort of pressures and distractions of all of the people in the big clinical schools. And I got to kind of just focus on my life, like my own learning and not compare myself to lots of other people that were around me and you know were going on big ward rounds and knew everything. (participant 33, preferenced)

Many other participants thought an extrovert or more social person was best suited to the program because they would not suffer from social isolation, being more outgoing and integrating themselves into the community. Additionally, extroverted students were thought to be more confident and able to seek out their own learning opportunities. Despite this, some self-described extroverts described how they felt socially isolated during the year, a phenomenon that they had limited experience or skills to manage and therefore found very challenging.

And it was, yeah, his [GP supervisor] sort of version of checking in was sort of like in a busy hallway saying, hey how are you going sort of things so I found it actually particularly isolating for me, which I wasn't really expecting. I sort of thought, you know, I'm sociable. I can make friends. But actually, I found it quite, quite challenging. (participant 31, preferenced)

Harnessing life experiences

Participants suggested students who had a range of personal and professional life experiences were suitable and would thrive in a rural LIC. It was perceived that through these experiences came students with well-developed support structures and strategies, allowing them to adjust quickly to living and learning in a small rural community. It was acknowledged that all students would require support at various stages during the academic year. Appropriate students were described as having prior experience that enabled them to readily recognise when they needed support and understand how to access their supports.

I do think somebody who has a bit of life experience who has really good supports in place and who's, who doesn't have these rose coloured glasses on about everything that's going to happen to them and wildly unrealistic expectations that, you know, everything will be handed to them on a plate, I think you need to have somebody with a little bit of realism in their life. (participant 26, preferenced)

Familiarity with rurality

Rural background participants often described that they wanted to undertake the clerkship due to an interest in rural medicine and an aversion to larger metropolitan tertiary hospitals and urban living. In part this was due to participants' comfort in a rural environment due to lived experience in small towns. In concurrence, non-rural background participants frequently described the ideal student as someone who had experienced a rural upbringing, as they would more easily adapt to a rural site due to familiarity and being comfortable in that setting.

But I think realistically, like people with a rural background, probably aren't a bad idea to go there because they're going to be able to cope with isolation and know how to work in a small community and, and those sorts of things. (participant 30, allocated)

Discussion

Previous efforts to identify medical students best suited for a rural LIC have primarily focused on characteristics such as student traits and academic achievement, aiming to determine who is likely to succeed in this clinical learning environment[7]. Our findings from rural LIC graduates offer unique insights into clinical school selection and provide a valuable contribution to this discourse on the graduates predicted to thrive in a rural LIC[7].

The 'who' that participants thought should consider becoming an LIC student was perceived to be an independent, self-directed learner. Within the literature, a self-directed learner can construct their learning structure, adapt to the learning environment, assess how well they are learning and take advantage of the clinical experiences at hand[14,15,34]. This aligns with the LIC pedagogy, where the integrated nature of the curriculum delivery provides freedom for students to construct their learning, particularly taking advantage of what has been termed 'white space'. White space is the unstructured time in an LIC and has been described as a way for students to independently explore and gain opportunities that meet their own learning needs[35]. While self-directed learning is a central tenet of adult education in universities, our findings suggest that there is a different perception regarding the level of self-direction required in an LIC. With this in mind, the concept of white space and how students can leverage it to thrive should be promoted to prospective students.

Moreover, the ability to thrive in white space has been shown to be overwhelming for students who are uncomfortable with the uncertainty of a less structured learning environment[15,35]. There are synergies between the rural learning environment and the work environment of rural clinicians, in particular rural generalists, who need to be comfortable in dealing with uncertainty[36]. Previous literature has shown rural GPs have a high interest in novelty seeking and are less risk-averse than urban GPs, suggesting those whose learning preferences are more flexible and autonomous, with less need for structure, may be better suited to a rural career[37,38]. If the overarching goal of rural LIC programs is workforce transformation, then selection processes should intentionally identify and recruit students who demonstrate

comfort with ambiguity and unstructured learning, traits that align with the competencies required for sustainable rural medical careers.

A commonly held view among participants was that extroverted personality traits are essential for success in an LIC, reflecting broader societal preferences for extroversion and a tendency to undervalue introversion[39,40]. However, this assumption was contested by self-identified introverts in our study, who described the smaller cohort size and the opportunity to build relationships over time as supportive of their learning. These findings are consistent with previous literature suggesting that introverted students may struggle in teaching environments that require rapid relationship-building, assertive verbal contributions or interaction in larger groups[39]. In contrast, within a goodness-of-fit model, introverts were considered well suited to one-on-one clinical learning environments with a preceptor, where respectful, individualised relationships could be developed that acknowledge both student strengths and areas for growth[39]. While this binary framing of personality types is increasingly disputed, given that personality is better understood as existing along a continuum that varies based on situations and environments, a more detailed exploration of the interaction between personality and LIC learning environment is warranted to inform recruitment and selection strategies, helping to widen voluntary participation.

Findings support further discussion around the selection policies for a rural LIC and the associated outcomes of mandated compared to voluntary participation. Previous research on compulsory components of a rural program found the experiences influenced students' interests in rural health, and this effect was not limited to those with pre-existing interests[41]. Alternatively, voluntary participation has been described as an aspirational goal to recruit a keen and enthusiastic cohort, and has been linked to positive workforce outcomes[16]. A direct comparison between students who self-select and those who are allocated to do a rural LIC is limited and has mainly focused on career intention[41], rather than workforce outcomes. Comparisons may add to the conversation about the outcomes of an 'all LIC' approach compared to other selection methods, where only a small number of the cohort's students participate in the LIC. In our cohort, some students were mandated to participate as they did not receive their highest preference. It is recommended that universities work collaboratively with the local health context to support and build effective training models that actively encourage voluntary selection[42]. This could be achieved through clear communication outlining the program's aim(s), the clerkship's pedagogy, and the type of learner best suited to thrive academically and personally within the environment.

Limitations

The advantage of this study was that it investigated selection methods from the perspective of graduates who, over time and with the influence of current work, could give a unique perspective. However, a limitation experienced was participant recall of reasons for their clinical school preferences due to the extended time since completion of the LIC.

Moreover, variations in the pedagogy, duration and setting across rural LIC programs can make comparisons challenging. As a result, we chose to focus on graduates from a single university for this study. However, this approach could be seen as a limitation, as the findings might not be generalisable.

Conclusion

Thriving in a rural LIC can be potentiated through linking of the 'why' and the 'who', ensuring the most suitable students are selecting and selected to undertake a rural LIC. Notably, there was a symbiosis between self-selection and learning preferences, which also has synergies with working as a rural clinician. Strategically integrating these insights into student selection policies has the potential to drive workforce transformation, ensuring that future clinicians are better suited to thrive in rural settings. Findings are of value to policymakers, universities and rural health services seeking to build targeted strategies to select and train medical students for rural practice.

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Conflicts of interest

The authors declare no conflicts of interest.

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Appendix I: Researcher positionality and reflexive statement

The research group comprised four researchers. The first author (MJB) has qualitative research experience and assisted with data collection, analysis and drafting this research manuscript. The author resides within the program's rural footprint and has both inside and outside experience with the rural LIC in terms of research outcomes. The second author (HB) has extensive qualitative research skills and was involved in consultation of qualitative approaches and in drafting the manuscript. This author also resides within the program's rural footprint and has a shared interest in the maldistribution of the medical workforce. This author has outside experience of the rural LIC program and is a trained registered nurse. The third author (LF) was involved in the drafting of the manuscript and due to role in the rural LIC was blinded to participant responses. This author is the Clinical Director of the LIC and Director of Rural Medical Education at Deakin University, and as such has inside experience with the rural LIC. This author is also a GP and medical educator, and has publications investigating the rural LIC. The fourth and senior author (JB) was involved in data collection, analysis and drafting of this manuscript, with previous experience in qualitative research approaches. This author resides within the program's rural footprint and is employed by the LIC, and thus has inside experience with the rural LIC. This author also has a number of research publications investigating the rural LIC.

Throughout the project we were attentive to some of the authors' roles within the program and what impact this may play in coercing participants, therefore initial recruitment was conducted by a member of staff external to the research group, with the third author not involved in recruitment, interviews or identifiable data. Participants were all provided with a plain language statement, with this acknowledged to have been read by participants at the beginning of each interview. Additionally, all participants had the opportunity to read their responses through transcribed interviews, allowing them to add or redact information.

During the data analysis stages, authors engaged in reflexive practices through memo writing and informal debriefs. Interviewer bias and depth of probing during interviews were also discussed as part of a reflexive approach. Indeed, reflections on both insider and outsider position were negotiated. For example, while some of the research team had inside experiences with the rural LIC, many authors also had outsider experiences from residing within the program's rural geographical footprint and have experience in rural health care. By balancing both experiences, we were able to analyse participant responses without influence from authors lived experiences, while leveraging our understanding of participant selection. Outcomes of this may improve selection policies and recruitment strategies.