



## Rural Horizons: Short-Term Rural Immersion and the Evolution of Medical Students' Attitudes Towards Rural Healthcare

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### Abstract

The formation of rural intention—the aspiration of medical students to practice in rural settings post-graduation—is a complex process, particularly during the early stages of medical students' professional and personal development, when career aspirations and life circumstances are evolving. Short-term rural immersion programs, such as the Kalgoorlie Immersion Program at Curtin Medical School, offer a unique opportunity to enrich this developmental phase through an experience of rural life and healthcare. This study examines the impact of the Kalgoorlie Immersion Program five-day rural immersion experience on perceptions of rural practice, career intentions, and interest in the Rural Clinical School of Western Australia of a group of second-year medical students. Using mixed-methods analysis of pre- and post-Kalgoorlie Immersion Program field trip data from 19 participants, the study found that the Program confirmed, refined, or opened the possibility of rural practice and interest in Rural Clinical School of Western Australia for students. The Program fostered engagement, addressed misconceptions, and helped students visualise themselves in rural settings. Short-term immersion programs like Kalgoorlie Immersion Program broaden the pipeline of future rural practitioners by complementing longer rural placements, such as Rural Clinical School of Western Australia. These programs help address workforce challenges in rural healthcare and produce well-rounded, empathetic doctors prepared to navigate diverse healthcare environments.

**Keywords:** *medical education, rural education, rural clinical placements, medical students, rural intention, community-based education*

### Introduction

The recruitment and retention of doctors in rural areas remains a persistent challenge in Australia and worldwide. Strategies to address this often include a focus on rural origin students and rural immersion programs during medical education, with longer immersion programs traditionally associated with higher rates of eventual rural practice (MacDonald & Duncanson, 2021; McGrail et al., 2023; Rural Health Workforce Australia, 2015; Smith et al., 2018). However, a reliance on rural origin and extended rural placements risks narrowing the field of potential rural practitioners and oversimplifying the complexity of this decision-making process for students.

Rural intention is shaped by multiple personal, professional, and logistical factors, particularly during the formative years of medical training. These include early experiences in rural healthcare, evolving professional identities, and life circumstances. McGrail and colleagues (2023)

observe “*The pathways to rural practice are rich and varied*” (p. 58). There is still much to learn about how these factors interact. Playford et al. (2017) suggest that there are factors of nature (rural origin and pre-existing rural interest) and nur-

ture (rural experiences) at work, but the evidence about how they interact is inconclusive. Smith et al. (2018) describe a process of “*ruralisation of students’ horizons*,” encompassing interrelated themes of “*preparation and support*,” rural or remote health experience and “*rural lifestyle and socialisation*” (p. 85).

Evidence is emerging that supports the potential for short-term rural immersion in creating positive attitudinal changes towards rural practice (Nyaradi et al., 2025). Short-term rural immersion programs can play a unique role by introducing students to rural healthcare and community life without requiring the substantial commitments associated with more extended programs such as the Rural Clinical School of Western Australia (RCSWA) that make them unavailable to some students. They present the possibility of rural practice and support student aspirations towards a longer rural placement. Through experience of rural locations and community, students gain a deeper understanding of what rural means in Western Australia and whether they can see themselves practising rurally in the future.

This study utilises student feedback to investigate the impact of a short-term rural immersion experience on the perspectives of second-year, pre-clinical medical students participating in the Kalgoorlie Immersion Program. Specifically, it explores how the program influences students’ understanding of rural healthcare, their evolving career intentions, and their perceptions of rural practice. Focusing on the complexity of rural intention formation, this study contributes to a more nuanced understanding of how short-term programs can complement broader efforts to address rural workforce shortages.

Ethics approval for the project was granted by the Curtin University Research Office, approval no. 20240167.

## Background

Curtin Medical School offers a Bachelor of Medicine, Bachelor of Surgery program with a key focus on providing doctors for rural Western Australia. As such, a minimum of 25% of places in the program are set aside for students of rural origin. The Curtin Medical School works closely with the Rural Clinical School of Western Australia (RCSWA) which currently provides the dominant rural experience offered to students from the three universities offering medical programs in Western Australia. It takes the form of a 12-month clinical placement at one of several sites across the state. This is in the fourth year of an undergraduate degree for Curtin students.

However, a full-year program such as RCSWA is not suitable for some students. It is a large financial commitment, requires relocation, and brings the challenges of being away from family and friends (Rural Health Workforce Australia, 2015). Relinquishing employment or accommodation in the notoriously difficult Perth housing market can also be a barrier (McNaught & Rhoding, 2022). In addition, not all applications to RCSWA are accepted, and it is not available to international students. It is expensive to run, and its value in creating graduates with rural intention is debatable. Playford et al. (2017) found that participation in RCSWA did not build rural intention if it was not already present. They said that a year-long rural clinical placement is a valuable learning experience even if a participant does not work rurally in the future. However, we must create a future rural workforce, and given demand outstrips available RCSWA places, the priority must be for those who not only want the RCSWA experience but also display rural workforce intentionality.

The potential of short-term rural immersion programs lies in several factors: their flexibility, facilitation of early exposure to rural settings, and they are less expensive to run and less

daunting for students than a commitment to a year-long program. They can open, maintain, refine, and solidify the possibility of rural practice, not only for students of rural origin, but can also support formation of intention in students of urban origin (Playford et al., 2021; Wright et al., 2014). They can also help students consider RCSWA as an option, potentially supporting successful applications and setting students up to get the most out of the experience.

Curtin University offers two short-term rural immersion experiences to second-year students. Rural Immersion Week is the first of these, held in March of the academic year for the entire second-year cohort set in various Wheatbelt locations in Western Australia. The second is the Kalgoorlie Immersion Program is an optional five-day program run during the mid-year fortnight break in July. Introduced in 2022, it is now in its third year. The program accepts a maximum of 20 students who are accompanied by two support staff and an academic lead. These students are pre-clinical, so the program focuses on understanding the community, local health issues and services, and what it is like to live in a rural area. Unlike the Rural Immersion Week program, students apply for the Kalgoorlie Immersion Program, and so the group is a subset of students who already have some interest in rural practice.

The students travel to the City of Kalgoorlie-Boulder, located in the Western Australian Goldfields, about 600 km northeast of Perth, on the traditional lands of the Wangkatja people. It is known for its historical connection to gold mining, which along with nickel, remains central to its economy (Kalgoorlie-Boulder Growth Plan Partnership, 2017). The city has a population of around 30,000, which is characterised by a mix of long-term residents and fly-in fly-out workers (Lucas, 2023). Aboriginal and Torres Strait Islander people constitute 12% of Kalgoorlie-Boulder's population, higher than the Western Australian average of 3.3% (Australian Bureau of Statistics, 2022). The Kalgoorlie population experiences higher rates of chronic diseases, such as diabetes, cardiovascular conditions, drug and alcohol use, and mental health challenges (WA Primary Health Alliance, 2024). Kalgoorlie experiences shortages and high turnover in all areas of healthcare staffing (Rural Health West, 2024), including doctors (Jefferies & Snowball, 2019). Poor perceptions of the liveability of the area are linked to the lower appeal of Kalgoorlie as a desirable place to live (Kalgoorlie-Boulder Growth Plan Partnership, 2017).

The Kalgoorlie Immersion Program for 2024 included visits to local tourist sites and community organisations, such as the men's shed and community garden, as well as tours and an opportunity to speak with staff from the hospital, Aboriginal health service, a mental health support service, Royal Flying Doctor Service, and RCSWA. A highlight of the trip for many students was a tour with a local Aboriginal family to dig for honey ants. Students were also provided with membership to the Goldfields Oasis Recreation Centre, which was well utilised by students, even beyond the allocated time in the program.

## Methodology

A case study approach was used to examine the effect of Kalgoorlie Immersion Program on students' career aspirations, perceptions of rural practice, and intentions regarding application for RCSWA. Information about the Kalgoorlie Immersion Program and an invitation to apply were provided to the second year cohort of 110 students via email and during class time, including at the Rural Immersion Week debrief session. A total of 20 applications were received, with 20 accepted and 19 students eventually participating. All students consented to involvement in the research project, although this was not required for participation in the program.

Prior to travelling to Kalgoorlie, students were surveyed about their earlier Rural Immersion Week experience using an online Qualtrics survey, to provide a baseline snapshot of their thinking about rural practice and gather a demographic profile of the group. The survey questions are listed in Appendix A. The data were exported from Qualtrics into an Excel spreadsheet for analysis.

Following the Kalgoorlie Immersion Program field trip, semi-structured interviews were conducted with each student. Students were asked to compare the Rural Immersion Week and Kalgoorlie Immersion Program experiences, describe how their thinking about rural life and practice may have changed, the most significant experiences of the trip, and how they thought the Kalgoorlie Immersion Program could be improved. They were also asked about their intentions regarding applications for RCSWA. The interview questions are shown in Appendix B. A clean-read version of the interview transcripts was produced and moved to an Excel spreadsheet for analysis.

The data were de-identified, with each respondent allocated a unique number to track responses across the data sets. The analysis utilised a mixed-methods approach, combining quantitative and qualitative data. A subscription version of ChatGPT was used to assist in organising, analysing, and synthesising data from the survey and interviews, supporting both the thematic analysis of qualitative data and the analysis of quantitative data.

For the quantitative data analysis, ChatGPT was used to process and summarise numerical data, identifying key patterns and trends. All statistical interpretations and conclusions were verified by the researchers to ensure accuracy and relevance.

For the thematic analysis, an iterative approach was taken, with preliminary themes identified using the AI tool and subsequently refined and validated by researchers. Final decisions regarding categorisation, theme selection, and scope were researcher-led, guided by expertise and continuous engagement with the data, ensuring that the analysis accurately reflected the data, aligned with the research questions, and remained relevant to the study's objectives.

## Findings

Of the cohort of 19 second-year medical students, nine identified as having a rural background, while the remaining 10 were from urban or non-rural areas. Rural-origin students hailed from various Western Australian locations: Broome, Albany, Karratha, Bunbury, Kalgoorlie, Port Hedland, Meekatharra, and Derby. Interstate locations were Darwin, Port Douglas, Cairns, and Yungaburra. The group also included two international students: one from Hong Kong and one from the Philippines. The cohort had a balanced gender distribution, with 10 students identifying as female and nine as male. The age of participants ranged from 18 to 21 years.

Many of the themes identified were consistent across both data sets:

- Understanding Rural Healthcare – Awareness of rural healthcare systems, disparities, and the critical need for rural doctors.
- Opportunities and Challenges of Rural Medical Practice – Hands-on learning experiences, community engagement and lifestyle.
- Exposure to Different Rural Settings – Insight into the varieties of rural experience, healthcare environments and delivery models.
- Personal and Professional Growth – Reflection on evolving perspectives and the ability to visualise a future in rural practice.
- Community Engagement and Contribution – Appreciation of the meaningful impact that doctors can make in rural communities.
- Hesitations and Lifestyle Considerations – Consideration of personal lifestyle preferences and potential concerns about rural practice.

These themes developed further in the Kalgoorlie Immersion Program interviews as students had time to reflect and compare the two rural immersion experiences, with interviews also allowing a little more exploration. The Program brought an additional theme to the fore, related to learning more about the RCSWA which had not been an element of Rural Immersion Week.

- Role of the Rural Clinical School (RCSWA) – Understanding the structure, application process, and learning opportunities within RCSWA.

Most students indicated that after the Rural Immersion Week trip they intended to work rurally on graduation, with 13 students selecting “probably yes,” five “definitely yes,” and one “unsure.” Seven students reported no change in their thinking, as they were already interested in rural practice and said the experience reinforced this desire. Some students (n = 5) said Rural Immersion Week had broadened their understanding of rural healthcare, while some (n = 4) found the experience clarified misconceptions. Several (n = 6) highlighted the critical need for rural doctors. Of the 10 urban origin students, two indicated that the Rural Immersion Week experience had changed their thinking about rural practice.

Following the Kalgoorlie Immersion Program, students were again asked whether their thinking had changed about rural life and practice. A total of 11 students indicated yes, seven students indicated no (again because it refined or confirmed intention) and one was unsure. Interview discussions show that the Kalgoorlie Immersion Program built on the Rural Immersion Week experience, often further refining and/or reinforcing the possibility of rural practice.

*I was already interested in working rurally and it just kind of increased my motivation to try and work there. (Respondent 17)*

*I already knew I wanted to do RCS [Rural Clinical School], and I already knew at some point in my career I'd like to do some sort of rural work. Kalgoorlie just reinforced that. (Respondent 16)*

Some students (n = 4) moved from uncertainty to a more favourable view of rural practice.

*Originally, I was open to practising rural, but after the trip, I'm more interested because of the support network among rural practitioners. (Respondent 13)*

*... touring the Rural Clinical School and even having exposure to the Kalgoorlie Health Campus ... really just pushed me towards that yes side. (Respondent 12)*

Some students (n = 5) were inspired by the potential to make meaningful contributions to rural communities and stronger interpersonal connections with patients and colleagues. One urban background student commented that following the two immersion experiences he would now prefer to work rurally, not having considered it an option before:

*I think that was like a huge like change in mentality ... I'd much rather prefer a rural environment to work in compared to a metro one just because of the experience and what kind of doctor I want to be in terms of ... engaging in community. .... You can engage in community much better in a rural setting compared to a metro setting. (Respondent 10)*

Students' comments showed they appreciated and wanted to be able to contribute to areas of need.

*A strong GP [General Practice] or rural generalist presence in a community ... impacts the health outcomes of that community. (Respondent 12)*

*I think both the other road trip and Kalgoorlie, showed me how valued doctors are in rural areas and how big a difference you can make. I knew you could make a difference, but I didn't realise quite how much. It's motivated me even more to work in a rural area once I graduate, even though I already wanted to. (Respondent 14)*

Some students (n = 8) made comments that suggested they were beginning to be able to visualise themselves in a rural setting.

*I could more picture myself, the opportunities I would have working rurally from the Kalgoorlie [trip]. I have a bonded place, so I'm going to be spending those three years*

*minimum [rurally] at some point, so I'm also just like very excited to see how that will fit into my life after Uni. (Respondent 2)*

*More than anything, it's opened up a bunch of conversations about what working rurally would look like and the questions I should be asking about it. (Respondent 19)*

*... every time I go out to rural country, as someone who hasn't really gone around WA very much, it makes it seem like it's very doable. It makes it less unfamiliar and like, oh yeah, I could do that. (Respondent 8)*

*It's made me more comfortable to go rural, but I always had an idea to just spend a little bit of time in rural locations. (Respondent 11)*

*I guess everyone was very frank about the reality of the situation and that it can be overwhelming and a lot of pressure. But I think that's really good to know as well because it's not setting you up for some glorified idea of what's going to happen. And you can be quite realistic about what you need to achieve in terms of self-care and stuff as well. (Respondent 2)*

*I think I'm more interested in working in ... rural areas because I found out that they have a huge support network among rural practitioners. (Respondent 13)*

Some students ( $n = 3$ ) expressed hesitations or began to form preferences due to personal or lifestyle factors.

*I would be open to working in Kalgoorlie for a little bit, . . . [but] . . . I just love my surfing, and I love the beach. (Respondent 2)*

*I think I'll go South because I can't tolerate the heat. (Respondent 6)*

Consistent with this being a group of students already interested in rural experience, there was only slight variation regarding rural intention across rural- and urban-origin students. Before the Kalgoorlie Immersion Program, rural-origin students (nine of nine) expressed strong rural intention, with eight indicating they “definitely” or “probably” intended to work rurally after graduation, compared to eight of 10 urban-origin students. After the Kalgoorlie Immersion Program, rural-origin students remained consistent, with seven confirming or reinforcing their rural intentions and two reporting a further increase in interest. Urban-origin students displayed a broader range of responses, with five confirming their rural intentions, four reporting a stronger interest, and one remaining uncertain. All the urban origin students reported the Kalgoorlie Immersion Program having a positive impact on their thinking about rural practice on graduation. Both rural and urban background students described the program as clarifying or broadening their perspectives and making rural practice seem more achievable and appealing. Some comments pointed to the value of experiencing more than one rural location.

*... being able at lunch, to just walk around. That was good because we were able to see so much. Even sitting at Nando's, we're able to talk to the person who works there. It was just so interesting because you learned that every rural town is different. (Respondent 15)*

*I think it really depends on the different rural towns. Like someone who chooses to go in Albany or Kalgoorlie to work there, they're two completely different rural towns. (Respondent 9)*

Student feedback also indicated a deepening understanding of healthcare needs and delivery in different settings along with an appreciation of the variety of rural communities and environments.

*I think just to understand how rural medicine works in Kalgoorlie is actually quite fascinating to me because I've never been [to] other rural areas. (Respondent 13)*

*I think looking at the RFDS [Royal Flying Doctor Service] ... was the standout for me, I really enjoyed having a chat to [the Doctor there] and just looking inside the planes and I didn't realise that they would be so enormous. I thought they were gonna be quite a quite a bit smaller than that but obviously if you have to travel long distances it makes sense, I guess. (Respondent 18)*

In relation to the honey ant tour with a local Aboriginal family, one student said:

*I didn't get much time to speak with the Elders, but [the] grandkids told me a lot about what they do in Kalgoorlie .... how going ... into the bush, is really a just a part of the day in their life. And I've never really been a part of that. I'm not well versed in that kind of cultural area, so I thought that was really interesting. And more of a healthcare side of things. I really enjoyed [visiting the Aboriginal Health Service] ... I thought that the way they handle things in terms of no scheduled appointments walk in was really unique. (Respondent 5)*

During the post- Kalgoorlie Immersion Program interviews, students were also asked about their intentions regarding application for RCSWA. During the trip and subsequent interviews, it was clear that RCSWA played a large part in students' thinking about how rural experience may fit into their careers. Seventeen students expressed strong interest in applying for RCSWA following participation in the Kalgoorlie Immersion Program. All nine rural-origin students expressed clear intentions to apply for RCSWA, emphasising how the program reinforced their pre-existing aspirations. One participant noted,

*I always wanted to do rural clinical school, but when we got to talk to the rural clinical school coordinators, that was really helpful because we all had a lot of questions and they answered a lot of them, which was nice. (Respondent 14)*

Of the 10 urban background students, seven said they intended to apply for the RCSWA, with two indicating that the Kalgoorlie Immersion Program had been the decisive factor in their thinking.

*Yes, that's one of the biggest things that I've, I guess come away very certain about. ... Yeah, from like a 50/50 to something I definitely want to pursue. (Respondent 12)*

Of the three other urban background students, two were international and therefore not eligible to apply, although they said they definitely would if given the opportunity. One response from a bonded student (who is required to spend three years in rural practice) was unclear, though they spoke positively about "being able to get immersed in not just your medical learning, but also the rural aspects of life" (Respondent 2). Overall, the Kalgoorlie Immersion Program was instrumental in solidifying rural-origin students' intentions while clarifying and expanding urban-origin students' perspectives on RCSWA.

Four students indicated that the Kalgoorlie Immersion Program had positively changed their thinking about RCSWA, and 11 that it had confirmed or reinforced their interest.

*It did change my outlook on RCS a little bit because it always has been a 60/40 decision and now maybe it's just swung the other way. (Respondent 3)*

While a visit to the RCSWA and a discussion with the RCSWA Coordinator for Esperance was included in the program, the most enthusiastic discussions took place over a dinner, which this coordinator attended. One student commented:

*The Rural Clinical School night... [was] ... really cool because I think it got everyone very excited about what was to come, and it was very nice to see everyone ... a bit hyped up after that. (Respondent 2)*

Nine students said the Kalgoorlie Immersion Program had provided them with knowledge about RCSWA that they had not found via other avenues. One student said that it was his interest in RCSWA that motivated him to participate in the Kalgoorlie Immersion Program, and several

mentioned the amount of information they were able to get about RCSWA and the application process as a significant aspect of the trip.

*It confirmed it and gave me a little bit more information because I wasn't aware as to where all of the sites were and how exactly it would run. (Respondent 18)*

*It was really good talking with the coordinator of Esperance because the whole process seems really difficult, but it was good to talk with her and get a better insight into how RCS is run and how the application process actually goes. (Respondent 8)*

*That talk with [the RCSWA Program Coordinator] especially as she was mentioning the differences between the big sites and the small sites, was really helpful. (Respondent 11)*

Students were enthusiastic about RCSWA for a variety of reasons including the interpersonal relationships possible as part of a smaller team and cohort of students.

*And then it just feels like in terms of a medical standpoint, you probably get to be more involved with the team and get to form some meaningful relationships with your [colleagues] and seniors. (Respondent 2)*

*I also think it would be fun to live with a group of medical students and sort of learn as a smaller cohort. I think I would really enjoy that part as well. (Respondent 6)*

The potential for the RCSWA to provide a better clinical learning opportunity than a placement in a metropolitan hospital was a key takeaway for many students. Some (n = 2) had assumed that the better learning experience would be in a large hospital; however, the Kalgoorlie Immersion Program showed the greater variety of opportunities as part of a much smaller team for significant, hands-on learning of clinical skills.

*... because in the initial stage my thinking was [if], I want the best training you'd have to be in a big city centre. ... So, if you can get more hands-on experience in a rural area, that would be my ideal. (Respondent 3)*

*I'm really interested by the potential for more hands-on opportunities, to be challenged a bit more and given a bit more responsibility. Sort of pushed a bit further. (Respondent 6)*

*I guess in terms of education, I thought there'd be a lot more experience that I could get as a medical student being one of six instead of 1 of 100 or so. (Respondent 8)*

*You wouldn't get the same experiences in a metro site because you would be sort of fighting to earn your place. Whereas in a rural place, ... you instantly get first-hand experience ... you might get called to do a C section one day or you might get called to do a surgical assist. And I feel like that experience is more valuable in the long term as a doctor because you want your clinical skills to outshine. (Respondent 7)*

*In rural hospitals, you're not just a wallflower. You might get called to catch the baby. (Respondent 19)*

Some students felt this clinical experience would better prepare them for the last stages of their training.

*When you're on rounds, a lot of the consultants or teachers can pick out the rural clinical students solely because of their skill set and how they're more adaptable to situations. (Respondent 12)*

*I just don't want to be useless as an intern, so I want to have the opportunity to get better clinical skills and clinical experience before I graduate. And I think RCS is my best opportunity to do that. (Respondent 1)*

## Discussion

In the second year of a five-year degree, students are still forming their professional identities and interests, and for many, their adult lives are still taking shape. They are also still developing an understanding of the complexities of healthcare systems and the realities of healthcare delivery in diverse settings. The complexity of life circumstances and career planning means many factors will influence eventual rural intention. Considering the Kalgoorlie Immersion Program within the broader educational and life journeys of medical students highlights how immersion experiences contribute to attitudes toward rural practice and the place it may occupy in future careers.

The Kalgoorlie Immersion Program allowed students to explore further what rural practice might look like for them and start visualising themselves in different settings. One student with a bonded place commented that the Program helped her start to see how the required minimum of three years rural practice would fit into her life and career. Many students' comments show they are exploring the prospect of future rural practice and how it might fit into their lives and careers. This aligns with the broader literature suggesting that rural intention is not a static concept but can evolve over time in response to experience (Playford et al., 2021). For students already considering rural practice, the Kalgoorlie Immersion Program confirmed and refined their intentions. The opportunity to experience two rural locations prompted students to reflect on the differences between each and appreciate the variety of rural experience and environments. Vujcich et al. (2020) also comment on the usefulness of this in an earlier study, observing, *"The experience of placements in two different regions ... helped some students understand they could work in some rural/remote contexts but not others"* (p. 546).

While rural origin is often associated with positive rural intention, the findings in this study align with Playford et al.'s (2021) conclusion that undergraduate rural exposure especially affects students from an urban background. Our findings demonstrate that a short-term program can have a significant impact on urban-origin students, with all students reporting a positive change in their thinking about rural practice. The increased interest in RCSWA among some urban-background students suggests that immersive experiences like the Kalgoorlie Immersion Program play a crucial role in expanding career considerations and the pipeline of students interested in exploring RCSWA and rural practice. This is a valuable outcome of the Program as there is a positive association between students undertaking RCSWA and eventual rural practice (Playford et al., 2014; Walker et al., 2012). Our data showed RCSWA emerging as a large part of students' thinking about the possibility of rural practice in their careers with the RCSWA elements of the Kalgoorlie Immersion Program experience a highlight for many students. It is not surprising that student feedback naturally gravitated towards RCSWA, as it is a tangible and established pathway, and the Program is run in students' second year when they are beginning to consider clinical placements and future training pathways.

Students interested in applying for RCSWA reported that the Kalgoorlie Immersion Program provided valuable insights into what the experience might offer. The opportunity to engage with an RCSWA coordinator allowed students to understand better the variety of sites available, the lifestyle and learning opportunities, and the potential professional benefits of the program. Importantly, this was first-hand knowledge from someone with an engaging personality who was deeply involved in the program and the experience of students.

The data suggest that interest in RCSWA served as both an outcome and a lens through which students evaluated their broader career intentions. This builds on existing literature linking RCSWA to rural practice (O'Sullivan et al., 2018; Playford et al., 2014), by suggesting that early exposure and engagement with the RCSWA can be a key motivating factor for students considering rural practice. While some students explicitly stated a desire to work rurally long

term, others saw RCSWA as a valuable stepping stone, a way to test the waters of rural practice without committing to a permanent move.

Our data suggest it is likely that programs such as the Kalgoorlie Immersion Program help to normalise rural practice and establish it as an option for students who might not otherwise have considered it. This would be a significant outcome as, according to Playford et al. (2017), RCSWA does not necessarily build rural intention in students unless it was there already. Experiences such as the Kalgoorlie Immersion Program also present rural practice as an option for those that do not have an interest or are not accepted for RCSWA. It is also possible that greater rural experience means that those who do RCSWA have a clearer idea of what rural practice means and what a successful placement would mean for them, thus supporting the transformation of rural intention into rural practice.

A significant finding of the study was the recognition by many students of rural placements as a superior clinical learning opportunity to those available in the metropolitan area. This realisation often contrasted with previous assumptions that metro hospitals offered the best clinical training. Students wanted to have the best clinical skills they could on graduation. They saw the opportunities for more hands-on experience as part of a small team (rather than a much larger group in a metropolitan teaching hospital) and the ability to be helpful and make an impact as significant advantages of rural experience.

Our data support the idea that short term rural immersion experiences can complement and support other learning experiences, by providing a variety of experiences over a longer period of students' development, helping to clarify intentions and expectations, and refining thinking about the suitability of various locations. In this way, they support successful long-term placements (such as the RCSWA) and those that have a rural commitment as a result of having a bonded place.

Student responses also highlighted the significance of peer-to-peer interaction in fostering personal and professional growth. Students discussed their experiences during unstructured time, such as over meals. The shared experience of being part of a small, like-minded cohort created a supportive environment where students could explore their aspirations, exchange ideas, and challenge assumptions.

Many reflections indicate that students are thinking deeply about the kind of doctors they want to become and the impact they hope to have. Students began to understand their strengths, preferences, and values in the context of their future careers. They also expressed the aspirational aspect of rural practice—making a meaningful difference in underserved communities and addressing healthcare inequities. These findings underscore the importance of immersion experiences in shaping future doctors and align with research that emphasises the role of personal values in career choices (Noya et al., 2021).

### **Future Directions for the Kalgoorlie Immersion Program**

Student satisfaction with the Kalgoorlie Immersion Program has been overwhelmingly positive, with praise for its organisation, diverse activities, and insights into rural healthcare and community dynamics. Many students found the experience exceeded their expectations. However, feedback suggests areas for enhancement to further strengthen the program. A recurring theme in student feedback was the desire for even more interaction with the local community. Students suggested inviting members of the local community to the evening meals or dinners or becoming involved in local projects.

The hospital tour emerged as an area for improvement. Students were very interested in the hospital but clearly hoped to learn more about its day-to-day operations. Meeting various staff and seeing behind the scenes aspects of the hospital would have enriched this experience.

Scheduling adjustments will also be considered for future trips. While many appreciated the program's varied itinerary, some noted that the first day felt overly busy and suggested grouping activities more strategically to allow for longer rest periods. A few participants also advocated for later start times, recognising the need for a balance between the program's rigour and students' need for recuperation during their mid-year break.

Peer-to-peer interaction emerged as one of the program's most impactful elements, with many students noting the value of time for reflection, discussion, and building of relationships within the group. Evening meals and downtime included in the program provided opportunity for this, as did visits to the Goldfields Oasis Recreation Centre. Many students commented on how much they enjoyed the Oasis visits. Plenty of scope for these interactions will be maintained in future programs.

Expanding participation is another important consideration. Introducing shorter immersion programs or introductory sessions could engage students who may not initially apply for the Kalgoorlie Immersion Program but would benefit from rural exposure. This approach could also support bonded students, helping them gain confidence and a positive outlook on rural placements.

The enthusiasm of international students who attended the Kalgoorlie Immersion Program highlights another area of opportunity. Creating similar initiatives for international participants or at the broader policy level, expanding eligibility for RCSWA could harness their potential to contribute to Australia's rural workforce.

For students considering the Rural Clinical School, the Kalgoorlie Immersion Program provided valuable insights into rural life and career pathways. Many found interactions with an RCSWA coordinator particularly helpful. Future iterations could build on this by incorporating more structured discussions with RCSWA leaders and alumni to clarify site options, logistics, and career planning.

## Conclusion

The Kalgoorlie Immersion Program demonstrates the potential of short-term rural immersion programs to play an important role in medical students' professional and personal development during a formative stage of their education. The Program effectively confirmed, refined, or established the possibility of rural practice and interest in the Rural Clinical School amongst this cohort of students. For many students, the Program allowed them to visualise themselves in rural settings, explore the rewards and challenges of rural practice, and clarify their career intentions. This supports students' decision-making, preparing them for more immersive experiences and for considering the role rural practice and experience may have in their careers. The Program's ability to foster engagement, address misconceptions, and provide insights into the realities of rural practice suggests its value in broadening the pipeline of future rural practitioners. These experiences also help students become better doctors, fostering adaptability, compassion, and a deeper understanding of healthcare delivery across diverse contexts. Even for students who do not pursue rural practice, programs like the Kalgoorlie Immersion Program contribute meaningfully to their development as skilled and empathetic healthcare providers.

Short-term immersion programs are scalable and cost-effective, providing an accessible alternative or complement to longer rural placements. Their ability to integrate early exposure to rural healthcare, support reflective learning, and cultivate personal and professional growth positions them as a valuable addition to medical education.

## References

- Australian Bureau of Statistics. (2022). Kalgoorlie-Boulder: Census all persons Quickstats. <https://abs.gov.au/census/find-census-data/quickstats/2021/LGA5428>
- Jefferies, F., & Snowball, K. (2019). Towards a medical workforce strategy for rural WA. <https://www.wagpet.com.au/media/io4pfevc/wa-rural-medical-workforce-strategy.pdf>
- Kalgoorlie-Boulder Growth Plan Partnership. (2017). Growing Kalgoorlie-Boulder growth plan: Part 3: Background and analysis. <https://www.ckb.wa.gov.au/documents/179/growing-kalgoorlie-boulder-growth-plan-viii>
- Lucas, J. (2023, February 27). FIFO workers put WA airport on track for record passenger numbers as expansion considered. ABC News. <https://www.abc.net.au/news/2023-02-27/fifo-driving-record-number-of-passenger-movements-at-kalgoorlie/102027460>
- MacDonald, A. L., & Duncanson, K. (2021). The effect of rural placements on future rural general practice. *Health Education in Practice: Journal of Research for Professional Learning*, 4(1), 34–46. <https://doi.org/10.33966/hepj.4.1.14798>
- McGrail, M. R., Doyle, Z., Fuller, L., Gupta, T. S., Shires, L., & Walters, L. (2023). The pathway to more rural doctors: The role of universities. *Medical Journal of Australia*, 219(3), S8–S13. <https://www.mja.com.au/journal/2023/219/3/pathway-more-rural-doctors-role-universities>
- McNaught, K., & Rhoding, C. (2022). Exploring the factors influencing medical student engagement with rural clinical placement opportunities. *Australian and International Journal of Rural Education*, 32(1), 70–84. <https://doi.org/10.47381/aijre.v32i1.312>
- Noya, F., Carr, S., Freeman, K., Thompson, S. Clifford, R., & Playford, D. (2021). Strategies to facilitate improved recruitment, development, and retention of the rural and remote medical workforce: A scoping review. *International Journal of Health Policy and Management*, 11(10), 2022–2037. <https://doi.org/10.34172/ijhpm.2021.160>
- Nyaradi, A., Solomons, T., & McNaught, K. (2025). Beyond the classroom: The transformative experience of short rural immersion programs for health professional students: A narrative review. *Medical Education*. 1-12. <https://doi.org/10.1111/medu.15612>
- O’Sullivan, B., McGrail, M., Russell, D., Walker, J., Chambers, H., Major, L., & Langham, R. (2018). Duration and setting of rural immersion during the medical degree relates to rural work outcomes. *Medical Education*, 52(8), 803–815. <https://doi.org/10.1111/medu.13578>
- Playford, D. E., Evans, S. F., Atkinson, D. N., Auret, K. A., & Riley, G. J. (2014). Impact of the Rural Clinical School of Western Australia on work location of medical graduates. *The Medical Journal of Australia*, 200(2), 104–107. <https://doi.org/10.5694/mja13.11082>
- Playford, D., Ngo, H., Gupta, S. & Puddey, I. B. (2017). Opting for rural practice: The influence of medical student origin, intention and immersion experience. *The Medical Journal of Australia*, 207(4), 154–158. <https://doi.org/10.5694/mja16.01322>
- Playford, D., Ngo, H., & Puddey, I. (2021). Intention mutability and translation of rural intention into actual rural medical practice. *Medical Education*, 55(4), 496–504. <https://doi.org/10.1111/medu.14404>

- Rural Health West. (2024). *Annual health workforce update: The rural nursing, midwifery, dental and allied health workforce in Western Australia*. <https://ruralhealthwest.com.au/wp-content/uploads/2024/06/Annual-Health-Workforce-Update-2023-FINAL.pdf>
- Rural Health Workforce Australia. (2015). *Training for the future: How are rural placements perceived and how do we give our students what they are looking for?* <https://nrhsn.org.au/wp-content/uploads/2022/11/Training-for-the-Future-1.pdf>
- Smith, T., Cross, M., Waller, S., Chambers, H., Farthing, A., Barraclough, F., Pit, S. W., Sutton, K., Muyambi, K., King, S., & Anderson, J. (2018). Ruralization of students' horizons: Insights into Australian health professional students' rural and remote placements. *Journal of Multidisciplinary Healthcare*, 11, 85–97. <https://doi.org/10.2147/jmdh.s150623>
- Vujcich, D. L., Toussaint, S., & Mak, D. B. (2020). “[It’s] more than just medicine”: The value and sustainability of mandatory, non-clinical, short-term rural placements in a Western Australian medical school. *Medical Teacher*, 42(5), 543–549. <https://doi.org/10.1080/0142159x.2020.1713309>
- WA Primary Health Alliance. (n.d.). *Goldfields-Esperance: Needs assessment 2022–2024*. [https://www.wapha.org.au/wp-content/uploads/2022/04/Needs-Assessment\\_Country-WA\\_Goldfields-Esperance.pdf](https://www.wapha.org.au/wp-content/uploads/2022/04/Needs-Assessment_Country-WA_Goldfields-Esperance.pdf)
- Walker, J., DeWitt, D., Pallant, J., & Cunningham, C. (2012). Rural origin plus a rural clinical school placement is a significant predictor of medical students' intentions to practice rurally: A multi-university study. *Rural and Remote Health*, 12(1), Article 1908. <https://doi.org/10.22605/rrh1908>
- Wright, J. R., Bourke, L., Waite, C. J., Holden, T. A., Goodwin, J. M., Marmo, A. L., Wilson, M. L., Malcolm, H. E., & Pierce, D. (2014). A short-term rural placement can change metropolitan medical students' knowledge of, and attitudes to, rural practice. *The Medical Journal of Australia*, 201(2), 106–108. <https://doi.org/10.5694/mja13.11329>

## Appendix A

*Questions used in Post Rural Immersion Week and pre-Kalgoorlie Immersion Program participant survey.*

1. Do you have a rural background?
  - No
  - Yes. If so, where?
2. What is your age?
3. How do you describe your gender?
  - Male
  - Female
  - Non-binary/third gender
  - Prefer to self-describe
  - Prefer not to say
4. Where did you go for the March 2024 Rural Immersion Week?
  - Brookton
  - Corrigin
  - Katanning
  - Kondinin
  - Dalwallinu
  - Moora
  - Wongan Hills
5. How do you feel about that experience now?
  - Very disappointed
  - Disappointed
  - Neutral
  - Satisfied
  - Very satisfied
6. What is the main reason you chose this rating?
7. At this stage are you thinking of working rurally on graduation?
  - Definitely not
  - Probably not
  - Unsure
  - Probably yes
  - Definitely yes

8. Did the March rural immersion experience change your thinking about the potential of rural practice?
  - No
  - Unsure
  - Yes
9. What is the main reason for changing or not changing your thinking about the potential of rural practice?
10. What was the key learning for you from the March rural immersion experience?

## Appendix B

*Questions used in the post-Kalgoorlie Immersion Program semi-structured interview.*

1. How do you compare your experience of the Kalgoorlie Immersion Program with eh other rural experiences you have had as a medical student such as the rural immersion week back in March?
2. Has the Kalgoorlie experience changed your thinking about rural life and practice?
  - How would you describe your change in thinking? OR
  - How has the Kalgoorlie immersion experience confirmed your thinking?
3. What was the most significant experience for you in your time in Kalgoorlie?
4. Are considering applying for RCS (Rural Clinical School) in the future?
  - If yes, why. If no, why?
5. Do you have thoughts on how the Kalgoorlie Immersion Program could be improved?



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