



BMJ Open Value and service match of advanced training skills among rural general practitioners: a qualitative Australian study

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ABSTRACT

Introduction Advanced skills training (AST) is a requirement for rural generalist training in Australia. This study explored the lived experience of general practitioners who have undertaken AST to better appreciate its value and fitness for purpose.

Methods Thirteen participants were recruited via convenience sampling. A descriptive phenomenological study design was employed. Semistructured interviews were conducted and thematically analysed to identify patterns in the data.

Results Participants identified the professional value of AST, describing improved clinical competence, clinical courage, development of professional networks, work satisfaction and recognition. AST enabled better provision and continuity of care to rural communities. Potential service mismatches between AST specialty selection and perceived community needs are a current challenge.

Conclusion Recommendations include refining the programme selection process, increasing programme flexibility and developing clearer guidelines to navigate training pathways. Future research should explore the value of AST from community perspectives to inform tailored approaches.

INTRODUCTION

Rural generalists (RGs), defined by the Australian College of Rural and Remote Medicine (ACCRM), are general practitioners (GPs) with specific expertise in the provision of medical care to rural and remote or isolated communities.¹ These doctors work both in primary care and hospital settings to improve the health and well-being of those who live outside of metropolitan cities.¹ An essential requirement of the training pathway to become an RG is advanced skills training (AST).² In Australia, AST is provided by two specialty colleges, the Royal Australian College of General Practitioners (RACGP) and ACCRM.^{2,3} AST requires the trainee to complete 12 months of focused training in

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study used a qualitative design, offering an in-depth exploration of advanced skills training (AST) experiences.
- ⇒ The inclusion of both rural generalist residents and those in local management positions allowed for insights from varying roles and responsibilities.
- ⇒ While there were several AST specialties reflected in this study, not all training programmes were represented, limiting the scope of findings.
- ⇒ Most participants were based in Queensland, where more established pathways for rural generalism exist, and perspectives from other states and territories are needed to gain a comprehensive understanding.
- ⇒ Community voices are an essential aspect of evaluating the impact of AST programmes and were not captured in this study.

an accredited training environment.³ To apply, trainees must be either enrolled in a GP College fellowship training pathway or be a fellowed RG or GP applying to undertake AST approved by a GP College.⁴ The trainee can select from a range of narrower specialties, including procedural ASTs (eg, surgery, obstetrics and gynaecology, emergency medicine or anaesthetics) and non-procedural ASTs (eg, paediatrics, mental health, internal medicine, academic practice or Aboriginal and Torres Strait Islander health).³ The purpose of the AST programme is to support RGs and GPs in rural and remote areas to attain advanced skills, expand the number of highly skilled practitioners in rural and remote areas who can supervise other doctors to gain advanced skills, create a robust training network and ensure communities can access physicians with the 'right skills in the right place when they need them'.⁴

It is important to determine the fitness for purpose of AST training programmes and to



determine if they are optimally designed and operationalised in a way that is best suited to the local needs and context of the communities where RGs work. Previous research in Australia has determined that trainees feel that their AST positively impacts their professional practice,⁵ and most AST trainees continue to actively apply their skills in the subsequent years following their training, but this decreases over time.⁶ This training has also been found to improve GP retention in rural areas.⁷ However, there is a need for more contemporary evidence on the experience of AST trainees to inform colleges, hospital training posts and policymakers to facilitate informed decision-making. Therefore, the purpose of this study was to explore the value and fitness for purpose of AST for GPs and proffer recommendations for improvement.

METHODS

Ethics

Ethics approval for the study was obtained from the James Cook University Human Research Ethics Committee, Australia (H9139). Permission to conduct and record the interviews for the purposes of this research was obtained by all participants.

STUDY DESIGN

This study employed a descriptive phenomenological study design to explore the experiences of GPs who have undertaken their AST.⁸ This methodology was selected as it focuses on understanding the lived experiences of individuals as they are, without imposing preconceived theories or interpretations.⁸ The research was guided by the Standards for Reporting Qualitative Research (online supplemental file 1).⁹

Recruitment and eligibility

Two groups of RGs were recruited for this study via convenience sampling: directors of medical services (DMS) and residents. The inclusion criteria required participants to be recognised as RGs and to have completed their AST in Australia. While both groups provided clinical services, the DMSs were involved in the recruitment of other RGs to their communities. DMSs were invited from a master list of contacts within the James Cook University General Practice Training programme. RG residents were invited from a list of participants who completed a survey for a separate arm of this project and who had indicated they were interested in participating in an interview about their AST experience. Of the 13 DMSs contacted, five participated in the study, and of the 17 RG residents contacted, eight participated in the study. Participants were compensated for their time with a \$50 grocery store gift voucher and were entered into a draw to win a \$100 department store gift voucher.

Data collection

Interviews were semistructured, providing a framework for the discussion while allowing for flexibility for participants to elaborate on their experiences. A research assistant (HM) was coached by a senior researcher (EA) on the expected protocol and technique for conducting the interviews, as well as the interview guide. The first interview was conducted by EA with HM in attendance to observe and familiarise themselves with the process, with the remaining interviews conducted by HM. Interviews took place between 29 September 2023 and 19 October 2023 via video conferencing and lasted between 20 and 45 minutes.

Research team and reflexivity

Reflexivity was central to the research process, involving ongoing, collaborative practices where researchers critically assess how their perspectives and contexts influence the study.¹⁰ Several strategies addressed reflexivity throughout the research. A multidisciplinary team with diverse expertise including qualitative experts, graduate students, medical professionals and those with prior AST experience conducted the study. For example, team members (AH, PH, TSG, RH and LM) with prior AST involvement provided valuable insights to help contextualise the findings; however, they were not directly involved in the data collection. Regular team meetings ensured that reflexivity was maintained. The team also kept detailed documentation, including researcher memos and interview notes, fostering transparency and critical self-reflection. While the team brought varied perspectives, both EA and HM had minimal prior AST involvement, ensuring relatively neutral stances. EA conducted the first interview with HM observing, allowing HM to refine her interviewing skills and maintain an open, critical perspective in subsequent interviews. Thematic coding was conducted by four team members who did not have prior experience with AST (BMA, EA, AS, HM). Finally, the team's collaborative involvement in data analysis and interpretation helped mitigate potential biases, enhancing the credibility and integrity of the findings.

Data analysis

Two transcription tools were used: Otter AI and Microsoft Teams' transcription feature. Transcripts were de-identified and imported into NVivo V. 20 (Lumivero, Colorado, USA).

An inductive thematic approach was undertaken to analyse the data, following Clarke and Braun's 6-step process.¹¹ (1) Two members of the research team (HM and AS) cleaned the transcriptions carefully and thoroughly, familiarising themselves with the data. (2) The coding process was piloted by three authors (HM, AS and EA). Once consistency was achieved, the remaining interviews were independently coded by HM or AS. (3) Codes were categorised into broader themes during a meeting between the primary coders (HM and AS). (4) A peer debriefing session was conducted to review the themes

with senior researchers EA and BMA, and refinements were made. (5) The scope and content of each theme were defined and refined by group consensus among the four authors (HM, AS, EA and BMA). (6) The report was prepared, and representative quotes from the participants were selected for each theme, which was agreed on by all team members.

Patient and public involvement

Patients and/or the public were not involved in this study.

RESULTS

Characteristics of participants

There were 13 participants in this study, with eight RG residents (four males, four females) and five DMSs (four males, one female). The most common advanced skill was anaesthetics ($n=5$), followed by emergency ($n=4$), obstetrics and gynaecology ($n=2$), internal medicine ($n=2$) and academic ($n=1$). One participant had two advanced skills including anaesthetics and emergency medicine. Most participants had completed their training through ACRRM ($n=10$), with three completing training through RACGP. Most were currently working in Queensland ($n=11$), with one participant working in the Northern Territory and another overseas.

Themes

Five key themes were developed from the interview data: professional value to the medical practitioner, caring for the community, building the rural workforce, potential service mismatch and adaptability with tailored support.

Professional value to the medical practitioner

Participants highlighted the value of AST on their clinical competence, clinical courage, professional networks, work satisfaction and recognition from others. Participants reflected on their ability to apply clinical skills within rural contexts that are often more isolated and resource-constrained. Participants also described how the training enabled them to view complex medical problems in a different way and broaden their scope of practice. Beyond clinical skills, both RG residents and DMSs felt that the AST programme fostered clinical courage to apply those skills in isolated rural settings.

I think for me; it really helped me just cut to the chase a bit more in terms of what do I think is the underlying pathophysiology for this condition and addressing it and being happier to push more diuretics or to, I guess, move a bit quicker with some other things because I've seen how it's done in a specialist setting. [RG Resident 8]

Participants felt that their training improved their work satisfaction and that their skills were generally recognised professionally and by the community. They highlighted the importance of professional networks in providing

support and sharing knowledge to collaborate effectively within their specialties.

I love doing epidurals because when I walk down the street a few months later, that mom goes to me, she's like, you...I remember you in labour... You saved me. And it's such a fun thing, because now I'm a year down the track and I'm vaccinating those babies. And the mum remembers that you did the epidural and they remember that impact that you had on their life at that time. And so that's a really nice feeling. [RG Resident 4]

Caring for the community

Participants reflected on the ways in which their AST brought value to the community and how they were acknowledged within the communities they worked. While most participants did not believe patients were aware if their GP had an advanced skill, they felt that patients were able to recognise when their GP was able to provide services outside of expected procedures.

They just see their doctor as either they have confidence in them being able to provide that care they need, or they don't. But I don't know... maybe the AST programme provides clinicians with the skills they need to inspire confidence in their community. [DMS 2]

Having more skills within the community because of AST reduced the need for patients to travel outside of the community for their medical care, alleviating burdens on both patients and their families, especially in terms of travel for medical care. It also enabled consistent and coherent provision of healthcare services to patients over time.

And then you go, and you do their pre-anaesthetic check, and then you get to do that anaesthetic, you get to see their surgery. And so, you know how to follow them up really safely. It's really nice. So, it's a good continuity of care for patients as well. [RG Resident 4]

Building the rural workforce

RGs considered the AST programme building an enhanced rural healthcare workforce by providing advanced skills, bridging the gap between primary and specialist care, and reducing costs associated with emergency transfers and logistics. Additionally, by enabling the local provision of services like obstetrics and surgery, AST contributes to reducing the burden on health services and minimising unnecessary medical transfers, thus enhancing efficiency and cost-effectiveness.

I think it helps bridge the gap between the rural general practice and tertiary level or like metropolitan level specialist care by providing more skills on the ground. [DMS 3]



Potential service mismatch

Participants discussed challenges they encountered in the AST landscape and in applying their skills after training. Both the RG residents and the DMSs identified the importance of matching AST specialty selection with community needs before undertaking training. This is to ensure the skill obtained fills a necessary gap, and that there is space for the GP to return to practice in the community.

Now, I think you need to find out where you want to work. And what is the skill that would be valued in that community? And I think that there needs to be more of a discussion about that process. [RG Resident 1]

Another challenge highlighted by participants who were already established GPs in their community was that their absence while they undertook the training (often 12 months) left a gap in services and added stress for other colleagues.

I think the single biggest issue is that I had to pack up and leave my community for a year. And the community definitely, you know, struggled. And my colleague definitely struggled without me... that was the biggest challenge, that kind of guilt leaving the community. [DMS 3]

Adaptability with tailored support

Both RG residents and DMSs offered recommendations for AST improvement. Suggestions were made to enhance the flexibility and adaptability of the training. This included expanding the options available for speciality selection and an opportunity to extend training duration to gain further confidence in practising skills independently.

I think I wish there were more options of AST. I wish you could do any advanced skills that you wanted in any specialty as long as you can find a job where you can apply them. [RG Resident 7]

A number of my colleagues have said that 12 months in a particular skill may or may not be enough to give confidence to independently work in that skill remotely from backup. I think having the ability to do a 12- or 24-month placement in the skill that you're doing would also be really good. [RG Resident 6]

Participants also reflected on recommendations to overcome the systemic barriers that impacted their training. Such recommendations included increased financial support, supervisory support and clearer formalised guidelines to inform trainee decision making.

One thing would be I would love to see an alignment between the rural generalist expectations, background requirements, and Queensland Health ability. So if the registrar obtains a place wherever they go, they know that this is the goalposts. I had to make the goalposts as we went, I had to shift the

goalposts accordingly, and then hopefully, I hoped ACCRM would accept it at the end of the day. [RG Resident 6]

DISCUSSION

This study provided valuable insights into the lived experiences of those who have undertaken AST. It is clear that AST provides professional value to the medical practitioner. GPs gain clinical specialist skills and obtain the confidence and clinical courage to apply these skills in lower-resourced settings.¹² The training allows them to expand their professional networks, and participants note that it improves work and career satisfaction. The programme enables GPs to care for the rural communities where they live and work, improving the quality of care and access to care.¹³ On a broader scale, participants felt that AST allows them to contribute to the rural workforce, alleviate rostering challenges and reduce health-care costs. However, it is evident that there are persisting gaps in training and unmet community needs, indicating room for improvement and refinement. A key issue may be the training, recruitment and retention of individual RGs with complementary skills that cover a wide range of narrower specialties, rather than employing teams skewed towards one or two narrower specialties. More community-based ASTs, for example, psychiatry, paediatrics and pain management, may be equally valuable in smaller communities.

The study's participant recommendations indicate that more structured processes are needed at the point of AST programme selection to prevent service mismatch. These processes should be guided by workforce shortages and community needs.¹⁴ However, there is limited evidence to show that the distribution of GPs with particular advanced skills is consistent with the distribution of medical needs. Previous researchers have recommended career and training support for those who undertake AST, and if enacted, this may act as a point of intersection for advice on AST selection.⁶

Recommendations for increased flexibility and adaptability within the programme were made by multiple participants. This could include an option to extend training time for trainees who do not feel sufficiently prepared to practise their skills independently. This could also include options to undertake part of the AST within the rural community. Adequate time and support for AST have been identified as key priorities for GP training by the Australian Medical Association.¹⁵ It is important to strike a balance between ensuring the sustainability of AST programmes and meeting the evolving needs of trainees.¹⁴ This balance requires a collaborative approach, where all stakeholders, including programme administrators, trainees and healthcare organisations, have a voice in shaping improvements.

Strengths, limitations and future directions

A strength of this study was that the qualitative design enhanced the understanding of AST experiences from the perspective of RGs, including those in local management roles. This enabled the relevant recommendations for future programme improvement from the perspectives of rural practitioners. There were some limitations. Not all AST specialty training programmes were represented in this study. Furthermore, most participants undertook training and were currently employed in Queensland, where more defined pathways for rural generalism are available. For a more holistic understanding of AST experiences across Australia, further research should be conducted with representation across all states and territories. Lastly, when understanding the value and fitness for purpose of AST, community voices are an important piece of the puzzle that was not represented in this study. Future studies should explore these perspectives. Health inequities and access to health services are a concern for rural communities across the globe,¹⁶ and other countries have dedicated efforts towards coordinated RG training (or similar programmes) to combat this.^{17 18} The results of this study promote the value of such training and showcase the positive impact AST can have on addressing gaps in healthcare in rural communities. In the future, refining AST programmes as they take shape across the globe to better align with their local community needs and workforce demands will ensure that AST remains a responsive solution to rural healthcare inequities.

CONCLUSION

AST is valuable for medical practitioners, the community and the medical workforce. However, there is a potential for service mismatch where, at times, the skills obtained by GPs may not reflect the needs of the communities in which they want to work. This constrains the efficiency of the AST programme and reduces its positive impact on rural communities. Service gaps may be left where a GP must leave their community to undertake training. Recommendations for programme improvement include increased flexibility and adaptability within the training, increased financial and supervisory support, and specific guidelines to help trainees confidently navigate their training programme. In conclusion, addressing service mismatches and implementing targeted improvements in training programmes can ensure that medical practitioners acquire the necessary skills to meet community needs while fostering confidence and professional growth.

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