

EDITORIAL

Rural and regional plastic surgery services

Jaeme Zwart FRACS (Plast)^{1,2,a}

¹ Sunshine Coast University Hospital, Sunshine Coast, Queensland, AUSTRALIA. ² Section Editor (Regional and Rural), Australasian Journal of Plastic Surgery, St Leonards, New South Wales, AUSTRALIA.

Keywords: plastic surgery, Australia, surgeons, workforce, rural

Submitted: August 2, 2024 AEST Revised: August 8, 2024 AEST Accepted: August 8, 2024 AEST

DOI: 10.34239/ajops.122347

Australasian Journal of Plastic Surgery

Vol 7, Issue 2, 2024

The plastic and reconstructive surgery workforce distribution across Australia is a significant problem. The workforce is maldistributed with a strong bias towards metropolitan patients, leaving rural and regional patients underserved. This is an issue that has arisen from historical metrocentric workforce planning and has proven itself quite difficult to undo or improve upon.

So, how big is the problem? As recently as 2023, 29.7 per cent of the Australian population (approximately seven million people) lived in a rural or remote location. Currently, 9.9 per cent of plastic surgeons work in these same areas.¹ In 2016 there were 424 plastic surgeons working in Australia.² Extrapolating this data, we can see that approximately 42 plastic surgeons service these seven million people! This is obviously a simplification, however it does highlight the lack of plastic surgery access for almost one-third of the patient population of Australia.

When the data for Primary Health Care Networks (PHCNs) is analysed, it further highlights the disparity in plastic surgeon numbers between rural and metropolitan Australia. It is possible to calculate an ideal ratio of plastic surgery workforce to patient ratio. In Australia this is estimated to be one plastic surgeon to every 57,118 patients (New Zealand 1:60,000).¹ On applying this ideal ratio to the workforce data for PHCNs, it becomes apparent that there is an oversaturation of plastic surgeons in certain areas. For example, Perth North PHCN has the highest plastic surgeon to patient ratio of 1:25,911, compared to North Coast NSW PHCN, the least serviced PHCN with a ratio of 1:177,980.¹

So, what does a rural or regional plastic surgery service look like and is it any different to an urban service? There are many unique issues for rural and regional surgeons. Often there are smaller facilities with limited staff. The patient population is more dispersed and there is less infrastructure available to the service. The scope of practice is classed as broad.³ The workload consists of more general plastic surgery, however, it can still include complex procedures such as free flap reconstruction. Rural or regional surgeons tend to see more hands, burns and trauma.³ The on-call commitments are more burdensome with rural surgeons doing 16 per cent more on-call shifts compared to metropolitan surgeons.³ Rural surgeons are less likely to work in private practice only and more likely to be involved in public care (27% of rural surgeons work in private practice only versus 70% in an urban setting).³

Importantly, a significant proportion of plastic surgeons who work outside of a large city are overseas trained and have undergone the Specialist International Medical Graduates (SIMG) pathway. In 2010, 50 per cent of those starting a rural practice were SIMG surgeons.⁴ All SIMG plastic surgeons have undergone or will undergo the same rigorous and challenging examination

^a Corresponding author: Jaeme Zwart FRACS (Plast); jaeme.zwart@health.qld.gov.au

process as we and our trainees have done. However, it is often from a remote location with minimal support or access to training materials. This makes a successful attempt at the exit exams even harder.

How do we reduce the gap? This is not as simple as placing more surgeons in rural or regional posts. We must consider short- and long-term aspects of the problem so that we can establish long-lasting health equity in plastic surgery for the Australian population.

In the short term there definitely needs to be an increase in plastic surgeons in rural and regional Australia. Perhaps we could look at other industries and see how the workforce is redistributed? Teaching, for example, uses a minimum service requirement and a points-based system of accrual, where service provided in rural settings allows for guaranteed urban placement. We could implement this for our new fellows.

A second option could be to increase the number of SIMG fellow positions, allowing more overseas trained surgeons to work in Australia. This, however, would require easier access to training resources and more support from the Royal Australasian College of Surgeons (RACS) if the current trend of supervision for two years and success in the fellowship exam is expected. It would be unfair to employ these people in a location that geographically prejudices them from completing RACS's requirements.

Thirdly, with buy in from the dominant PHCNs, regional services could be 'owned' by a tertiary referral service and operate as a 'hub and spoke' model providing surgeons and surgical services within the regional community. Perhaps a period of secondment for all surgeons working within the urban centre could be entertained? This would increase the regional numbers of surgeons and educate the larger centres on the unique needs and requirements of that regional community.

In the long term, Australia needs a workforce that considers rural surgery to be a normal pathway, rather than the exception. There is a lot of evidence that shows a positive rural exposure in training can lead to higher retention rates.⁵ The effect is even greater when the trainee is of rural origin and has rural medical school experience.⁶

In order to do this, we need more rural training posts. Currently, one of the biggest limitations to achieving a training post is the requirement of three supervising surgeons as a minimum. Often this is not possible, despite some regional centres

doing large volumes of high-quality work. When considering a possible new training post, more consideration should be given to the level of supervision and the quality of the exposure, rather than the number of supervising surgeons. It is felt that often there is a higher level of junior doctor supervision in regional settings than is provided in some or many metropolitan centres.⁷

With the increase in rural training posts, more trainees can see and appreciate that there are significant similarities to a metropolitan practice alongside many unique aspects of working in a rural setting. This may broaden the appeal and hopefully demystify what happens outside of major centres. This can potentially lead to more interest in pursuing a rural career.

Monetary incentives are another option that should be explored. This has been used in general practice however it has shown mixed results. The General Practice Rural Incentives Program resulted in an increase in newly-qualified GPs practicing in densely populated regional locations but no change in the overall number of rural GPs relative to metropolitan areas.⁸ In 2020 the program was replaced with the Workforce Incentives Program and further critical analysis would be prudent.

Lastly, we need to provide adequate support and training for those choosing to work outside metropolitan centres. Isolation, helplessness and a lack of support are common feelings among those working in rural areas, particularly in single surgeon practices. Often, rural careers end prematurely due to these pressures and an overwhelming workload. The average rural career in Australia is approximately 15 years. With planned support programs and opportunities for ongoing education this could be extended for an entire career.

Ultimately, in order to change our current workforce bias, we need to have a voice for rural surgery at every level of decision-making, from the hospital level, all the way up to PHCNs, government and especially within RACS where long-term influence is most likely. Almost one-third of Australians live outside a major centre. These rural Australians need a voice so why shouldn't all decisions regarding plastic surgery in Australia be made by panels that have proportional representation?

As mentioned earlier, this is a very difficult and complex problem, with no simple or single fix. Establishing health equity is the responsibility of all plastic surgeons, not just the less than 10 per

cent of those who work in regional Australia. Working as a collective, we can and should improve the lives of our regional patients and support our hard-working rural colleagues.

I strongly encourage all plastic surgeons, particularly those who are involved in workforce decision making, to read the exemplary work published by RACS entitled *Rural health equity strategic action plan*.⁹

References

- 1 Australian Society of Plastic Surgeons. *Guide to establishing a regional or rural plastic and reconstructive surgery service* [PDF on internet]. [Published January 2023; cited 11 August 2024]. Available from: <https://plasticsurgery.org.au/wp-content/uploads/2023/02/ASPS-Guide-to-Establishing-a-Regional-or-Rural-Plastic-Surgery-Service-1.pdf>.
- 2 Australian Government Department of Health. *Plastic Surgery 2016 Factsheet* [PDF on internet]. [Published October 2017; cited 11 August 2024]. Available from: <https://hwd.health.gov.au/resources/publications/factsheet-mdcl-plastic-surgery-2016.pdf>.
- 3 Australian Society of Plastic Surgeons. Plastic Surgery Workforce Survey 2022. Unpublished.
- 4 Royal Australasian College of Surgeons. Rural and regional surgical services (2014) [web page]. [Cited 5 August 2024]. Available from: <https://www.surgeons.org/about-racs/position-papers/rural-and-regional-surgical-services-2014>.
- 5 Kumar S, Clancy B. Retention of physicians and surgeons in rural areas—what works? *J Public Health*. 2021;43(4):e689–e700. <https://doi.org/10.1093/pubmed/fdaa031> PMID:32140721
- 6 Royal Australasian College of Surgeons. *Train for Rural. Rural Health Equity Strategy* [PDF on internet]. [Published April 2021; cited 11 August 2024]. Available from: <https://www.surgeons.org/-/media/Project/RACS/surgeons-org/files/interest-groups-sections/Rural-Surgery/2-Train-for-Rural.pdf?rev=2e53ad7ecb3e4864be9dcc69e0556bb1&hash=6EF8D4FD8F5C13332C8C625D920E42C6>.
- 7 Bonney A, Mullan J, Hammond A, Burns P, Yeo G, Thomson B, Flynn S, Carrigan T. A case-study of the experiences of junior medical officers in the emergency departments of a metropolitan hospital and rural hospital. *Aust J Rural Health*. 2019;27(6):476–81. <https://doi.org/10.1111/ajr.12526> PMID:31691410
- 8 Yong J, Scott A, Gravelle H, Sivey P, McGrail M. Do rural incentives payments affect entries and exits of general practitioners? *Soc Sci Med*. 2018;214:197–205. <https://doi.org/10.1016/j.socscimed.2018.08.014> PMID:30177362
- 9 Royal Australasian College of Surgeons. *Rural health equity strategic action plan* [PDF on internet]. [Published 15 December 2020; cited 11 August 2024]. Available from: <https://www.surgeons.org/News/News/Rural-Health-Equity-Strategic-Action-Plan>.



CC-BY-4. This is an open access article distributed under the Creative Commons Attribution 4.0 International License (CC-BY-4) which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited. View this license's legal deed at <http://creativecommons.org/licenses/by/4.0> and legal code at <http://creativecommons.org/licenses/by/4.0/legalcode> for more information.