



australian diagnostic imaging association

INQUIRY INTO THE PROVISION OF GP AND RELATED PRIMARY HEALTH SERVICES TO OUTER METROPOLITAN, RURAL, AND REGIONAL AUSTRALIANS

ADIA submission (September 2021)

ADIA is grateful for the opportunity to provide a submission to the Senate Community Affairs References Committee inquiry into the provision of general practitioner and related primary health services to outer metropolitan, rural, and regional Australians. ADIA's submission focuses on the relationship between radiology and GPs, and the role of radiology as a cornerstone of quality primary care.

ADIA would welcome the opportunity to participate in a public hearing.

About ADIA

ADIA is the peak industry body representing private and not-for-profit radiology practices in Australia, with member practices providing x-ray, ultrasound, CT, MRI, nuclear medicine, and PET services in more than 600 locations across the country. ADIA promotes the ongoing development of policy, standards, and appropriate funding to ensure that all Australians have affordable access to quality radiology services. This supports radiology's central role in the diagnosis, treatment, and management of a broad range of conditions in every branch of medicine.

Introduction and recommendations

Radiology is central to primary care, playing a critical role in the diagnosis, treatment and management of patients, with around one in ten GP visits resulting in a referral for radiology services.¹

Radiology enables early and more accurate diagnosis of conditions, meaning that patients can be treated more effectively and less expensively. It also reduces the burden on our hospitals by reducing the need for hospital admissions and more complex treatment.

Access to radiology across all parts of Australia is therefore critical to the provision of quality primary health care services. However, the radiology workforce is suffering from chronic shortages, particularly in outer metropolitan, rural and regional Australia. This impacts on timeliness, cost and access to radiology services for patients, and their referrers, particularly GPs and others in the primary care sector.

¹ Britt H, Miller GC, Henderson J, Bayram C, Harrison C, Valenti L, Pan Y, Charles J, Pollack AJ, Wong C, Gordon J. (2016) *General practice activity in Australia 2015–16. General practice series no. 40*. Sydney: Sydney University Press.

To improve the provision of radiology to outer metropolitan, rural and regional Australians, ADIA recommends that:

1. MM 3-7 areas should be classified as automatic DWS for radiology, with MM 2 and outer metropolitan MM 1 areas subject to a service test, and inner metropolitan MM 1 areas classified as automatic non-DWS.
2. When determining DWS classifications using a service test, the Department of Health should use only Medicare data relating to services that involve a radiologist on-site during provision of the service. This will ensure that DWS determinations more accurately reflect locations where there is a workforce shortage.
3. The Government increases funding to support radiology training at private practices in regional and rural areas.
4. Medicare rebates for nuclear medicine services are indexed. This will bring nuclear medicine into line with other radiology modalities, improving access to more affordable care for patients across Australia.

This submission addresses each of the terms of reference in turn.

a) The provision of GP and related primary health services to outer metropolitan, rural, and regional Australians, with reference to the current state of outer metropolitan, rural, and regional GPs and related services

Shortage of radiologists

1. Anecdotal evidence indicates that there is a shortage of radiologists in Australia, felt most acutely in outer metropolitan, rural and regional Australia. These workforce shortages are also apparent in other diagnostic imaging professions, including radiographers and sonographers. The difficulties in improving and sustaining the number of radiologists, particularly in regional and rural locations, is compounded by Australian and international evidence that indicates that the most predictive factors for a doctor's place of work and residence are:
 - Site of origin and that of life partner; and
 - Training time in metropolitan versus rural locations.²
2. These historical/cultural factors highlight the difficulty of recruiting radiologists to locations outside the centres of major cities, especially given the limited opportunities to experience training in those areas.
3. ADIA is in the process of completing a radiology workforce survey, which will provide detailed information on radiologist workforce shortages in different geographic settings. ADIA would be pleased to make a supplementary submission to the Committee when the results are available in October 2021.

b) Current state and former Government reforms to outer metropolitan, rural and regional GP services and their impact on GPs, including policies such as:

(ii) Current state and former Government reforms to outer metropolitan, rural and regional GP services and their impact on GPs, including policies such as: Distribution Priority Area and the Modified Monash Model (MMM) geographical classification system

On-site radiologists are important

4. An on-site radiologist is a key component of providing quality radiology services. The radiologist role is not limited to reporting imaging examinations; radiologists are an integral part of the entire service:
 - Radiologists consider the appropriateness of imaging referrals/requests, including the most effective way of performing the study in accordance with the As Low as Reasonable Achievable principle for minimising radiation exposure.
 - Radiologists provide consultative supervision of all activities with the practice and are available to treat a patient in the event of an emergency or adverse reaction.
 - Radiologists communicate urgent results to referring clinicians and are available to advise referrers on appropriate imaging.

² Royal Australian and New Zealand College of Radiologists (2018) *2016 RANZCR Clinical Radiology Workforce Census Report: Australia*. Royal Australian and New Zealand College of Radiologists.

- Radiologists personally attend procedures when required and in line with best clinical practice.
 - A radiologist on-site enables access to radiology services that require in-person supervision or performance.³
5. Teleradiology is not a straight substitute for radiology services provided with a radiologist on-site, because an unsupervised practice can only offer a limited range of services. Radiology practices without an on-site radiologist are unable to offer a full range of essential radiology services, such as image-guided interventional procedures including biopsies, breast imaging, musculoskeletal ultrasound, nuclear medicine and CT with contrast.

Shortage of radiologists outside inner metropolitan areas

6. As indicated above, there is a shortage of radiologists in Australia, particularly in outer metropolitan, rural and regional Australia. It continues to be difficult to improve this situation, especially given the place of origin of most radiologists, who tend to be trained in metropolitan locations, and the limited training opportunities in regional and rural locations.

The DWS system is preventing radiology practices from addressing radiologist shortages

7. Where radiology providers in outer metropolitan, regional or rural locations cannot employ an Australian-trained radiologist, they will seek to employ an international medical graduate (IMG) radiologist – an experienced radiologist trained overseas who has been certified to practice in Australia.
8. However, IMGs are only permitted to practice in a district of workforce shortage (DWS). This is problematic, because for many locations the current DWS classifications do not reflect the workforce situation, with locations with a shortage of radiologists classified as non-DWS. This means that providers are unable to employ IMGs when an Australian-trained radiologist cannot be found.
9. An area is classified as DWS where the ratio of specialists to population is less than the national average. When making this calculation, the Department of Health uses Medicare service data for all radiology services to determine the number of specialists in a location, but this is not appropriate for radiology:
- Radiology services involve two distinct phases: the imaging service (acquisition of images) and reporting of the service by a radiologist. The radiologist is often at a different location to where the imaging service is performed (particularly for regional or rural practices which utilise teleradiology).
 - Medicare billing data for a radiology service does not show where the radiologist is located, because radiologists use a provider number that corresponds with the location where the imaging service is performed, including in cases where they report the service elsewhere.
10. Accordingly, the number of radiology services provided in a location does not necessarily indicate the number of radiologists in that location, because it does not distinguish between services provided with a radiologist on-site and services provided without a radiologist on-site. For example, the Department's current methodology assumes that an ultrasound examination

³ Royal Australian and New Zealand College of Radiologists (2014) *The role and value of the clinical radiologist – Position paper*. Royal Australian and New Zealand College of Radiologists.

performed in Dubbo indicates that the reporting radiologist is also located in Dubbo, even where the radiologist may be located in Sydney.

11. Some communities with either no radiologist on-site or a substantial radiologist shortage are classified as non-DWS, because the number of radiology services is to be above the national average. For example:

- Yeppoon and Rockhampton (Queensland)
- Wauchope (NSW)
- Warragul and Warrnambool (Victoria)

12. Meanwhile, some inner metropolitan locations with ample radiology supply like Hawthorn (Victoria), Double Bay (NSW) and Indooroopilly (Queensland) are classified as DWS for diagnostic radiology.

The Government's proposal to amend DWS for specialists

13. The Department of Health is aware of the problems with the current methodology and is considering a proposal to designate all Modified Monash (MM) 3-7 areas as automatic DWS for specialists, with a revised service test for MM 2 (regional centres), and automatic non-DWS for MM 1 (major cities).

- The proposal is intended to cover all specialist groups. Given the unique service model in radiology, the Department should consider separate arrangements for radiology to avoid unintended consequences.

14. ADIA supports the concept of automatically designating some areas as automatic DWS or automatic non-DWS in principle.

- For example, in practice all MM 3-7 locations have a workforce shortage in radiology, and it is appropriate for these locations to be classified as DWS.
- Likewise, inner metropolitan areas have an adequate supply of radiologists and could be automatically classified as non-DWS.

15. However, ADIA does not support automatic non-DWS for all MM 1 areas, which would jeopardise access to radiology services in outer metropolitan locations.

- Locations such as Wollongong and most of the central coast (NSW) and Mandurah (WA) are classified as MM 1 despite being a significant distance from the centre of major cities and experiencing a shortage of Australian-trained radiologists.

16. Due to the overall shortage of radiologists in Australia, many outer metropolitan locations have radiologist workforce shortages, with at least 45 outer metropolitan practices relying on IMGs to meet their workforce needs.

- Automatically classifying these locations as non-DWS will jeopardise the provision of radiology services, as practices will be unable to employ IMGs when an Australian-trained radiologist cannot be found. Some practices will close, while others will be forced to limit or stop offering services that require a radiologist on-site, such as musculoskeletal ultrasound, biopsies, breast imaging, nuclear medicine, and CT with contrast.

17. It is unrealistic to expect that classifying all MM 1 areas as non-DWS will lead to a significant shift in IMGs practicing in regional and rural areas, noting the points made earlier about radiologists' preferred locations of residence and place of work.

Recommendation 1

ADIA recommends that MM 3-7 areas should be classified as automatic DWS for radiology, with MM 2 and outer metropolitan MM 1 areas subject to a service test, and inner metropolitan MM 1 areas classified as automatic non-DWS.

An appropriate service test for determining DWS in radiology

18. Where a service test is used to determine whether a location is DWS for radiology, it needs to be very carefully designed to ensure that it generates data that presents a true picture of the number of radiologists in each location.
19. ADIA suggests that the service test for determining DWS in outer MM 1 and MM 2 areas should use only services for which a radiologist is on site at the practice location, such as the following Medicare items:
- 104 – referred consultation
 - 55054 – ultrasound, interventional procedure
 - 55848 – ultrasound, musculoskeletal interventional procedure
 - 57341 – CT, interventional procedure
 - 57360 – CT of the coronary arteries
 - 59300 – diagnostic mammography of both breasts
 - 59302 – three dimensional tomosynthesis of both breasts

Recommendation 2

When determining DWS classifications using a service test, the Department of Health should use only Medicare data relating to services that involve a radiologist on-site during provision of the service. This will ensure that DWS determinations more accurately reflect locations where there is a workforce shortage.

(iii) Current state and former Government reforms to outer metropolitan, rural and regional GP services and their impact on GPs, including policies such as: GP training reforms

20. Recruiting IMG radiologists is only part of the solution to workforce shortages, and longer-term initiatives are needed to build a healthy radiology workforce in regional and rural settings and reduce over-reliance on teleradiology.
21. Improving radiology training opportunities in regional and rural settings lies at the centre of building a healthier radiology workforce. Australian evidence strongly supports the need to increase specialist training in regional and rural locations, to subsequently improve the workforce distribution. For example, participants in the Australian Rural Clinical School program were 1.5 times more likely to be in rural practice, and those who undertook an extended rural placement were 2.6 times more likely to be in rural practice.⁴

⁴ McGirr, J., et al, 'The Australian Rural Clinical School (RCS) program supports rural medical workforce: evidence from a cross-sectional study of 12 RCSs'. *Rural and Remote Health* 2019; 19:4971. <https://doi.org/10.22605/RRH4971>

22. Over the long-term, this improves the numbers of radiologists practising in those settings, thereby improving patient access to radiology services.
23. Private radiology providers, who provide most radiology services outside metropolitan areas (including under contract at public hospitals), are keen to expand their role in the radiology training program, particularly at their regional and rural practices. However, the training program is currently city-centric and there are several barriers to rural and regional training:
- Training site accreditation standards that are inflexible and overbearing, and based on the model of practice in metropolitan teaching hospitals, rather than the range of practice models used in other settings.
 - Most radiology training is centrally controlled by metropolitan teaching hospitals.
 - Private radiology provides much of the (relatively limited) registrar training in rural and regional Australia. However, the current arrangements mean that radiologists' time is a critically scarce resource, given their dual roles as senior clinicians, and as supervisors of registrars. These competing time demands for the small number of supervising radiologists means that training places must be limited to maintain a suitable throughput of patients.
 - Registrar positions in regional and rural areas only attract a small amount of government support for cost recovery under the Specialist Training Program (STP).

Recommendation 3

ADIA recommends that the Government increases funding to support radiology training at private practices in regional and rural areas.

(iv) Current state and former Government reforms to outer metropolitan, rural and regional GP services and their impact on GPs, including policies such as: Medicare rebate freeze

Unfreeze Medicare rebates for nuclear medicine

24. After a freeze lasting more than two decades, annual indexation of Medicare rebates for x-ray, ultrasound and CT services recommenced on 1 July 2020. The Government has further announced (in Budget 2021-22) that Medicare rebates for MRI services will be indexed from 1 July 2022.
25. However, Medicare rebates for nuclear medicine services remain frozen, which puts the sustainability of affordable nuclear medicine services at risk.
26. Nuclear medicine is used to diagnose and determine the severity of diseases, particularly cancer and heart conditions. It may also identify disease at the earliest stage, before symptoms occur or abnormalities can be detected with other diagnostic tests. These services are very expensive to provide, with the cost of radioactive tracers constituting 25-40% of the Medicare rebate alone for many nuclear medicine services.
27. The cost of these services, and the rebate freeze means that nuclear medicine has some of the highest gaps and upfront costs in all of Medicare.

Recommendation 4

ADIA recommends an end to the Medicare rebate freeze for nuclear medicine. This will bring nuclear medicine into line with other radiology modalities, improving access to more affordable care for patients across Australia.

c) The impact of the COVID-19 pandemic on doctor shortages in outer metropolitan, rural, and regional Australia

The 'pipeline' of IMG radiologists to address workforce shortages has stopped

28. The pandemic has impacted on the supply of IMG radiologists, as border closures have significantly reduced the number of IMG radiologists entering Australia. This will have a long-term detrimental impact on the radiology workforce in regional and rural Australia, with the shortage of radiologists increasing significantly.
29. This has added pressure on the already stretched regional and rural workforce, which has impacted in turn on their capacity to serve the needs of patients

Impact of the pandemic on diagnosis of patient conditions

30. The COVID-19 pandemic has been very disruptive to radiology services in Australia. According to one study, the first wave of the pandemic alone significantly reduced services across several radiology modalities, particularly general radiography, ultrasound, and MRI services.⁵ Considerable resources will be required to meet the built-up demand, which will be exacerbated in rural, remote and outer metropolitan areas owing to labour shortages.
31. Speaking to the Senate Select Committee on COVID-19, Dr Omar Khorshid, President of the Australian Medical Association, noted the pandemic's significant impacts on non-COVID-related areas of health and care, including delays in care and diagnoses.⁶
32. Lockdowns have led to delayed diagnoses, that could lead to worse health outcomes.⁷ This is an issue that particularly affects radiology as an early detector of health conditions, as well as impacting on the health sector overall – for instance, with increased demands placed on emergency departments in hospitals, and more severe, long-term chronic conditions.

⁵ Sreedharan, S. et al (2021) The impact of the COVID-19 pandemic on diagnostic imaging services in Australia. *Journal of Medical Imaging and Radiation Oncology*, July 2021. Available at: <https://doi.org/10.1111/1754-9485.13291> (Accessed 10/09/21)

⁶ Commonwealth of Australia (2021) Proof Committee Hansard: Senate Select Committee on COVID-19, Australian Government's response to the COVID-19 pandemic (Public). 21 September 2021, Canberra. Available at: https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/COVID-19/COVID19/Public_Hearings (Accessed 22/09/21)

⁷ See for example, French study that found patients diagnosed with metastatic colorectal cancer following France's 55-day lockdown had on average a tumour seven times the average size of a pre-lockdown diagnosis, leading to a lower survival rate. As reported in Cooney, E. (2021) Pandemic lockdown tied to worse outcomes in metastatic colorectal cancer, French study says. *Stat News* (8/09/21) Available at: <https://www.statnews.com/2021/09/08/pandemic-lockdown-tied-to-worse-outcomes-metastatic-colorectal-cancer-study/> (Accessed 16/09/21)