Submission No 715

INQUIRY INTO HEALTH OUTCOMES AND ACCESS TO HEALTH AND HOSPITAL SERVICES IN RURAL, REGIONAL AND REMOTE NEW SOUTH WALES

Organisation: Radiation Therapy Advisory Group (RTAG)

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Response Paper

RADIATION THERAPY ADVISORY GROUP

Health outcomes and access to health and hospital services in rural, regional, and remote New South Wales

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Background

The Radiation Therapy Advisory Group (RTAG) is comprised of people and organisations who are aligned in their desire to raise the profile of radiation therapy and ensure it is adequately funded by government. Since its inception RTAG has focused on highlighting the lack of radiation therapy use and access in Australia, particularly in regional and rural areas.

In the lead up to the 2019 general election RTAG launched a national campaign to secure bi-partisan funding commitments for radiation therapy treatment centres in 12 regional locations, seven of which are located in NSW. We continue to provide highly informed advice to government and to the general public about radiation therapy and associated health policy issues.

Most recently, RTAG lead a campaign to ensure that the breast cancer screening program in NSW was resumed immediately having been suspended as part of measures to combat the COVID-19 pandemic. RTAG therefore has a unique perspective on health outcomes in regional and rural Australia, and an extensive record of campaigning to improve them.

It is unfortunate that we were unable to submit this response to the inquiry prior to the close of consultation in January 2021. However, with the progression of the inquiry and in light of some of the concerning evidence arising from the latest set of hearings, we felt compelled to submit this response and ensure our expertise on the issue of poorer cancer outcomes and access to cancer treatment services in rural, regional, and remote New South Wales is considered by the Committee.

This is especially important given the failure of the proposed regional radiation therapy centres at Armidale and Bega / Eurobodalla to receive funding from the Regional Cancer Treatment Centres for Radiation Therapy Grant Opportunity, and the failure of the recent Radiation Oncology Health Procurement Grants Program (ROHPG) Review to remedy longstanding issues regarding the states' identification of priority areas, and funding issues for more advanced radiation therapy technologies.

Regional NSW, Cancer and Radiation Therapy

Radiation therapy contributes to 40% of all cancer cures. It is a particularly effective treatment for many cancers and is underutilised in Australia as compared with other developed countries. It is also known to be highly cost effective as compared with surgery, especially for breast and prostate cancers.[1] If one includes the use of radiation therapy in palliative care, radiation therapy is used at some stage in as much as 50% of cancer treatments.[2]

There is a significant body of evidence that distance from the nearest radiation therapy treatment centre can greatly reduce cancer patients' outcomes and mortality.[3,4,5] A report in the Medical Journal of Australia in 2004 found that people with cancer in remote New South Wales were 35% more likely to die within five

1 A Cost-Benefit Comparison of Surgery and Radiation Therapy for the Treatment of Common Cancers in Australia: Report to the Radiation Therapy Advisory Group. Prepared by Evaluate, 14 August 2018
2 Butler S M., Changes to radiotherapy utilisation in Western NSW after the opening of a local service. Journal of medical radiation sciences, 64(4), 2017, 251–258. https://doi.org/10.1002/jmrs.204
3 Venchiarutti, R. L., Hill, J., Tahir, A. R. M., Dwyer, P., and Young, J. M. (2020) Influence of remoteness of residence on timeliness of diagnosis and treatment of oral cavity and oropharynx cancer: a retrospective cohort study, Journal of Medical Imaging and Radiation Oncology 64, 261-270, doi:10.1111/1754-9485.12990
4 Merie, Gabriel, Shafiq, Vinod, Barton, Delaney (2019) Radiotherapy underutilisation and its impact on local control and survival in New South Wales, Australia, Radiotherapy & Oncology 141, 41-47 DOI: https://doi.org/10.1016/j.radonc.2019.09.012
5 Batumalai, V., Shariq, J, Gabriel, G., Hanna, T. P., Delaney, G. P., Barton. M. (2018) Impact of radiotherapy underutilisation measured by survival shortfall, years of potential life lost and disability-adjusted life years lost in New South Wales, Australia, Radiotherapy and Oncology, 1-5

years of diagnosis than patients in metropolitan areas, and in the 16 years since that report was released things have not improved sufficiently.[6]

These figures demonstrate that equity of access to radiation therapy (and indeed cancer treatment more broadly) has not been achieved in Australia. Cancer Council Australia found cancer mortality is 33% higher for people living in Australia's most disadvantaged areas (many of which are rural and regional) while those living in the highest socioeconomic areas (most of which are metropolitan) had the lowest (136 per 100,000).[7]

Similarly, the latest Australian Institute of Health and Welfare (AIHW) report *Radiotherapy in Australia 2018-19* shows that radiation therapy waiting times are 50% longer for those in the lowest socio-economic areas and shortest for those patients living in the highest socio-economic areas.[8] Median waiting time for radiation therapy differs by up to 300% between different states and territories while indigenous Australians receive 1.6% of all radiation therapy courses despite comprising 3.3% of the Australian population. In regional NSW a contributing factor to lower survival rates for people with cancer in rural areas includes the higher proportion of Aboriginal and Torres Strait Islander peoples.[9]

Factors contributing to poor patient outcomes have been identified as restricted access to diagnostic and treatment services including specialist service, cost of travel and physical accessibility in terms of distance.[10,11] In addition to the added costs travel and accommodation entails for regional and rural cancer patients, the cost of cancer treatment itself is often greater for regional patients, with many having to rely on private clinics for lack of nearer public cancer treatment facilities. Consequently, one in five cancer patients in regional NSW miss appointments because of the cost.[12]

However, with only 11 of 157 regional chemotherapy administering centres providing radiation oncology treatment as of late 2018, there is a dearth of radiation therapy treatment centres in regional Australia.[13] Those who do receive radiation therapy have to face long drives and many nights away from home.

As the inquiry has already heard from numerous witnesses, including the CEO of the Cancer Council NSW, some patients will risk cancer recurrence, deliberately accept disease progression or tolerate poor symptom control because of the distances and time away from family, work and farms. Studies have demonstrated that mortality increases by 6% for each 100km distance from the nearest radiation facility.[14] As Ms Garemyn, Policy Manager, Country Women's Association of NSW recently testified to the inquiry on 6 October, it is not uncommon for cancer patients in rural NSW to have to "travel hundreds of kilometres—400 kilometres—to seek those services", forcing many to elect not to receive the treatment they need.[15]

In fact, RTAG believes that the disappointing situation regarding cancer treatment and outcomes in regional Australia fail to show the full picture of the increasing inequity of the distribution of investment in radiation therapy. Those areas with long wait times tend to also be those with significant access issues (be that distance

6 Jong, K. E., Smith, D. P., Yu, X. Q., O'Connell, D. L., Goldstein, D., and Armstrong, B. K. (2004) Remoteness of residence and survival from cancer in New South Wales, Medical Journal of Australia 180(12) 618-622 doi: 10.5694/j.1326-5377.2004.tb06123.x
7 https://www.aihw.gov.au/getmedia/8c9fcf52-0055-41a0-96d9-f81b0feb98cf/aihw-can-123.pdf.aspx?inline=true
8 https://www.aihw.gov.au/reports/radiotherapy/radiotherapy-in-australia-2018-19/contents/introduction
9 National Rural Health Alliance, Fact Sheet – Cancer in Rural Areas, 2012, available from: https://ruralhealth.org.au/sites/default/files/publications/fact-sheet-08-cancer-rural-australia.pdf
10 National Rural Health Alliance (NHRA), Cancer in Rural Australia. Mapping Rural and Regional Oncology Services in Australia, 2012.
11 Sharma D. K., Vangaveti V. N., Larking S., Geographical Access to Radiation Therapy in North Queensland: A Retrospective Analysis of Patient Travel to Radiation Therapy Before and After the Opening of an Additional Radiotherapy Facility, Rural Remote Health, 16(1) 2016, p.3640.
12 https://www.abc.net.au/news/2021-10-05/regional-nsw-health-inquiry-hearing/100512088
13 Underhill C. et al. Mapping Oncology Services in Regional and Rural Australia, The Australian Journal of Rural Health, 17(6) 2009, pp.321-329.
14 Baade P. D., Dasgupta P., Aitken J. F., Turrell G., Distance to the Closest Radiotherapy Facility and Survival After a Diagnosis of Rectal Cancer in Queensland, Medical Journal of Australia, 195(6), 2011, p.350.
15 Portfolio Committee No. 2 – Health, Inquiry in to Health Outcomes and Access to Health and Hospital Services in Rural, Regional and Remote New South Wales, Virtual Hearing Via Videoconference, Wednesday 6 October 2021, Ms Garemyn, Policy Manager, Country Women's Association of NSW available from: https://www.parliament.nsw.gov.au/lcdocs/transcripts/2586/Transcript%20-%20RRR%20Health%20inquiry%20-%206%20October%202021%20-%20UNCORRECTED.pdf

or availability), which are also coupled with inadequate referral pathways. Some regional and rural cancer patients are not even aware that radiation therapy is a possible viable treatment for their disease.

These areas see much lower rates of radiation therapy referral and utilisation, even in cases where it is clearly clinically indicated as superior to other options. Evidence regarding patient outcomes for regional centres indicates that treatment results are comparable with those published by tertiary referral centres, yet factors like those outlined so far in this submission result in an underutilisation of this life-saving treatment.[16] An independent New South Wales medical study found in respect of just breast cancer patients, the underutilisation of radiation therapy led to the deaths of 85 patients over a three-year period.

As a result, these longer wait times may reflect only those actually referred for radiation therapy as an option therefore representing the "tip of the iceberg" as an indicator of growing inequality of access. Considering half of all cancer patients are clinically indicated as requiring radiation in the course of their treatment, this is a truly unacceptable state of affairs.

RTAG's Radiation Therapy for Regional Australia Campaign and Priority Areas

Implemented just prior to the 2019 General Election, RTAG's Radiation Therapy for Regional Australia campaign advocated for the establishment of radiation therapy centres in 12 regions across New South Wales, Queensland, South Australia, Victoria, and Western Australia. These areas are at least a one-hour drive (two-hour round trip) away from a radiation therapy treatment centre and constituted areas that have largely slipped through the net of the ROHPG Scheme's priority area identification, meaning many cancer patients in those areas were not able to receive clinically optimal treatment for their cancer.

The selection of the 12 sites recommended by RTAG was also based upon the establishment of a population threshold above which radiation therapy treatment centres were considered both economically viable and medically necessary. This immediate "local" population threshold was set at roughly 30,000 people or above; the 12 locations recommended by RTAG are also regional centres that would each act as healthcare hubs for a significantly wider population.

The campaign was successful in securing a $63 million commitment from the Australian Government to build treatment centres in all 12 communities.

Unfortunately, two years on from the Australian Government's announcement, only five centres have received contract agreements. The remainder, two of which lie in NSW (Armidale and Bega / Eurobodalla), have been passed over by the grant scheme. RTAG conducted extensive research into the need and viability of both these centres, including serviceable population sizes and distances from the nearest radiation therapy centre. The rejection of radiation therapy centres in these two areas does not make sense.

Armidale has a population of 30,000 and is 110km from the nearest radiation therapy centre at Tamworth. Armidale is the administrative centre for the Northern Tablelands region which has a wider population of nearly 75,000. Conversely, the proposed radiation therapy centre for Bega / Eurobodalla would serve an estimated 80,000 people whose nearest treatment centre is currently 200km in Canberra.

Both populations can sustain radiation therapy centres and warrant improved access. Moreover, elsewhere across Australia comparably sized population centres to Armidale and significantly smaller ones than Bega / Eurobodalla have been awarded grants, most of which are closer to existing radiation therapy centres.

As Dr Michael Holland, Co-founder of the One New Eurobodalla Hospital advocacy group confirmed to the inquiry on 6 October, "there has been no objective improvement" with regard to access to cancer services in

16 Rahbari R. M., Winley L., Hill J., Tahir A. R. M., McKay M., Last A., Shakespeare T. P. and Dwyer P., Definitive Intensity-Modulated Radiotherapy Concurrent with Systemic Therapy for Oropharyngeal Squamous Cell Carcinoma: Outcomes from an Integrated Regional Australia Cancer Centre, "Journal of Medical Imaging and Radiation Oncology, 60, 2016, p.414.

the last 12 months. As he cited, "the situation in the Eurobodalla is either to travel three hours to Canberra, three hours to Nowra or 4½ hours to Sydney". The lack of life-saving radiation therapy uptake "primarily occurs because of the inability to access services locally", an issue "shared by most rural and regional areas."[17]

Additionally, data from the Australian Cancer Atlas show that in Bega / Eurobodalla region excess deaths from cancer in Bega, Eden and the surrounding hinterland ranging from 19, 23, 33 per cent higher than the national average, respectively. In Armidale and the surrounding region, excess deaths from cancer are range between an estimated 6 and 15 per cent higher than the national average.[18]

It is essential that the Australian Government finishes the rollout of regional radiation therapy centres and follows through on its commitment to cancer patients in regional and rural communities. It is also absolutely critical that state governments start identifying priority areas of need. In this regard, the determination of priority areas is acknowledged across the sector as deeply flawed, and fails to reflect multiple areas of need nationally.

The formation of RTAG and the implementation of the Radiation Therapy for Regional Australia Campaign was instigated by sector concern about Federal Government funding changes to the ROHPG Scheme in the 2016-17 Mid-Year Economic and Fiscal Outlook (MYEFO). These changes affected radiation therapy nationally, but regional and rural communities that were already underserviced by radiation therapy were particularly impacted. This is in part because it required states to identify priority areas of need, which they have frequently failed to do.

In July this year, the Australian Government released its Final Report of the review of the ROHPG Scheme. RTAG's constituent members are in agreement that the ROHPG scheme is an essential and historically successful program and we welcomed the Final Report's support for its continuation. However, as noted in our response to the Review's consultation, the ROHPG and the changes made to it in 2017 have significant flaws with acute consequences for regional and rural communities.

Notably, the lack of an agreed or mandated quantitative methodology for the identification of priority areas is a major barrier to the ROHPG Scheme's success. The current system fails to provide any consistency at a national level, or even within individual states and territories, which are responsible for designating priority areas of need. There have also been unfortunate examples of conflicts between the levels of government.

RTAG has recommended that population, demographic and specialised technology criteria be included in the identification of priority areas, and that an implementation timeline be delineated and incorporated into the priority area identification process. To the extent that identification of priority areas remains in the remit of the States and Territories, we have also recommended regular mandated benchmarking both at a national level and within each jurisdiction.

The evident insufficiency of the current priority area identification system means that areas of genuine need are not identified and therefore underserved. This has been particularly problematic for regional cancer centres that had pre-existing struggles in providing adequate investment into radiation oncology services to large, disparate networks of people. Conversely, some areas that no longer have a genuine need have remained on the register even after a radiation therapy centre has been provided.

New Technologies and Regional Areas

The changes to the ROHPG scheme that instigated the formation of RTAG have also reduced the funding available to procure and deliver new linear accelerators (linacs) for current and future treatment centres. The changes saw Federal Government funding limited to linacs, capped at $300,000 per year, per machine, for up

17 Portfolio Committee No. 2 – Health, Inquiry in to Health Outcomes and Access to Health and Hospital Services in Rural, Regional and Remote New South Wales, Virtual Hearing Via Videoconference, Wednesday 6 October 2021, Dr Michael Holland, Co-founder of the One New Eurobodalla Hospital advocacy group available from: https://www.parliament.nsw.gov.au/lcdocs/transcripts/2586/Transcript%20-%20RRR%20Health%20inquiry%20-%206%20October%202021%20-%20UNCORRECTED.pdf,
18 https://atlas.cancer.org.au/app

to 10 years. Funding was no longer based on Medicare Benefits Schedule throughput and eligibility now depends on if the service will be provided in a 'priority area'[19].

Coupled with the deficient methodology for identifying areas of need, even when these areas are identified, the decision to fund only linacs as opposed to the full suite of radiation oncology equipment has significantly impeded the provision of modern, up-to-date, industry standard care in the radiation oncology sector, and is based on an outdated understanding of radiation therapy technology.

Linacs are the final step in a process of cancer treatment that involves many other critical systems and technologies. Other technologies are not only critical but improve the treatment process by delivering it faster, imaging the cancer more efficiently and safely, and incorporating quality control processes into the treatment.

For example, advances in planning and treatment delivery have enabled hypofractionation – the use of shorter, higher-dose treatment schedules – which improves outcomes for the patient and enables better access for other patients, due to higher throughput. Hypofractionation can reduce radiation therapy treatments to a mere five sessions (or fractions) for many patients with breast or prostate cancer. This is of enormous benefit to cancer patients who are forced to travel enormous distances to receive their treatment, limiting the interruption to their home and work life by requiring less time in hospital, and reducing the imposition of substantial accommodation expenses.

This and other more up to date treatment modalities such as stereotactic body radiation therapy (SBRT) and brachytherapy are not included in the ROHPG funding scheme. Nor are Network information Systems that allow radiation therapy providers to integrate the latest technology into their practice and improve patient outcomes are also not included in the scheme.

The focus of the ROHPG Scheme on linacs has reduced cancer centres' capacity to diversify their treatment methods, limited existing sites' capacity to upgrade or replace equipment and prevented them from keeping up with clinical best practice.

Investment in the latest technology results in better outcomes for cancer patients, which means fewer patients will need to return to the healthcare system in later years to treat side effects or toxicities from their previous treatments. In turn, a capital investment in the most advanced technologies now will save money down the line in patient costs.

Unfortunately, the Final Report entirely neglects to recommend the inclusion of new and more effective radiation oncology technology to improve health outcomes for cancer patients. The necessity of widening the technologies eligible for ROHPG funding constituted a substantial part of RTAG's submission, but has been completely omitted from the Final Report.

The Final Report cites a proposed hybrid model of funding, whereby several options exist for the combination of elements of the previously described funding mechanisms. These include "the segmentation of grant funding into two sections, with the first being a lump sum capital contribution (e.g. $3 million), and the second attracting a contingent quality associated funding incentive, or penalty, to incentivise quality".[20]

RTAG believes this may represent an interesting opportunity to explore for funding upgrades or complementary capital equipment items, but this is no substitute for a widening of the eligible technology to include the most advanced and efficacious treatments that rural cancer patients so frequently don't have access to.

As a result, regional priority areas of need, even when identified, are unable to provide the latest and most effective radiation therapies for cancer patients. Furthermore, it may be that for some patients in regional and

19 Areas of Need" for radiation therapy are documented in the Assessment of Priority Areas within Australia until 2019-20. http://www.health.gov.au/internet/main/publishing.nsf/Content/health-roi-hpg-priority-2018
20 Australian Government Department of Health, Review of the Radiation Oncology Health Program Grant Scheme: Final Report, 18 December 2020, p.20.

rural areas, the nearest metropolitan area providing radiation therapy may not be able to provide the life-saving modern technology their particular cancer requires.

Coupled with the undoubted backlogs in cancer diagnoses and treatments resulting from COVID-19, many experts are expecting a deluge of more advanced cancer cases in the months and years to come. This will only serve to exacerbate inequalities in cancer care provision for rural and regional New South Wales unless active measures are taken now.