

RANZCR FRO

Radiation Oncology Health Program Grant (ROHPG) Funding

Executive Summary:

- Radiation Oncology Health Program Grant (ROHPG) funding has been instrumental in providing patient access to modern, up-to-date radiation oncology equipment
- Modern equipment allows for advanced techniques, aimed at improving cure rates and reduced side effects
- The quarantining of HPG funding, rather than having this as part of general MBS revenue, is a critical enabler for equipment renewal
- The ROHPG program should be enhanced, to ensure that it stays up-to-date with incremental changes in both function and cost of equipment – to help ensure equipment reliability and patient access to current and advanced technologies
- To help ensure the delivery of safe and high quality radiation oncology services, ROHPG funding could be linked to a facility's compliance with the [Radiation Oncology Practice Standards](#).

About Radiation Therapy:

Radiation therapy is a safe, effective and well-established way to treat cancer. It uses highly precise doses of radiation to kill cancer cells while avoiding irreparable damage to the surrounding healthy tissue. Advances in radiation therapy use the latest research in biology and physics and combine it with cutting-edge technology to deliver successful treatments.

Radiation therapy is involved in about 40% of all cancer cures (compared to 49% of patients being cured by surgery and 11% of patients for systemic treatments)¹ and, in vast numbers of incurable patients, it improves the quality of remaining life.

Cancer is the leading cause of death in Australia. The 2012 report on cancer incidence projections by the Australian Institute of Health and Welfare (AIHW)² highlights the significance of the age related increase in cancer incidence across Australia. The AIHW report projects that the number of cases of cancer diagnosed in Australia will rise over the next decade for both males and females. This rate is expected to reach about 150,000 in 2020 – an increase of almost 40% from 2007. Increases in the number of cases diagnosed are due primarily to the ageing and increasing population and are expected to be most evident in older populations. In this context, enabling a quality radiation therapy service across Australia, together with access, becomes paramount to cancer management.

The Faculty of Radiation Oncology in the Royal Australian and New Zealand College of Radiologists (RANZCR) is the peak body advancing patient care and representing the specialty of radiation oncology across Australia and New Zealand. The Faculty presents the professional opinion of radiation oncologists with regards to priorities and access issues in

¹ SBU, The Swedish Council on Technology Assessment in Health Care: radiotherapy for cancer, ACTA ONCOL 1996; 1:35

² Australian Institute of Health and Welfare 2012. Cancer incidence projections: Australia, 2011 to 2020. Cancer Series no. 66. Cat. No. CAN 62. Canberra: AIHW

radiation therapy. The Faculty's members span public and private facilities, metropolitan and regional centres and a full range of radiation therapy techniques and tumour streams.

Radiation therapy services are delivered by both public and private sector providers. While the funding of radiation therapy services is complicated by the shared funding arrangements between the Commonwealth and the States/Territories; the Medicare Benefits Schedule (MBS) and other Commonwealth funding mechanisms are important in ensuring that patients can access advanced radiation therapy techniques. In the absence of such support, radiation therapy services and specific techniques are either not made available or are available to some patients but not others.

Historically, the ability of the radiation therapy sector to expand services to meet the growing demand for cancer treatments has been achieved through a mix of public hospital-based departments, private providers subcontracted to deliver services on behalf of the public system, and privately owned centres. The Faculty of Radiation Oncology supports a complementary mix of public and private radiation oncology service providers in line with the broader College policy. According to the 2015 Faculty of Radiation Oncology facilities-based census³, Australia currently has 36 private, 36 public and two public-private facilities.

Capital Funding for Radiation Therapy – Radiation Oncology Health Program Grants (ROHPG):

Radiation Oncology Health Program Grants (ROHPGs) are a Commonwealth initiative that provides capital funding for radiation oncology services outside of Medicare. Whereas Medicare pays benefits to patients for the professional and operating costs of radiation oncology services, ROHPGs are a contribution from the Commonwealth to facilities towards approved equipment. Approved equipment includes planning computer systems, linear accelerators (linacs), brachytherapy equipment, and radiation therapy simulators.

ROHPGs were introduced in 1988 to improve access to, and the supply of, radiation oncology services in the private and public sectors – to ensure the highest quality and safety of radiation oncology services, and ultimately advance outcomes for cancer patients. This was in response to concerns that the number of radiation oncology facilities across Australia was insufficient in comparison to other countries.

The success of the current ROHPG program can be seen by contrasting the current average age of linear accelerators in Australia to the average linac age 10 years ago. Today's linacs are significantly younger and their average age is comparable between public and private radiation therapy providers. ROHPG funding provides a strong incentive to replace the equipment once it has reached its expected throughput – which also helps to ensure that today's linacs are capable of delivering the most current treatment techniques.

The increasing incidence of cancer in Australia means that the vital role of ROHPGs is ongoing, to maintain radiation therapy capital equipment, especially the nation's fleet of linear accelerators, within its agreed lifespan.

³ In-house data from the RANZCR Faculty of Radiation Oncology self-reported facility-based census in 2015 (100% response rate)

The Faculty is seeking assurance and consideration to maintaining the ROHPG program as a national initiative linked to MBS funding for the following reasons:

- Quality radiation oncology services are best achieved via a national approach to service planning and delivery. RANZCR sees ROHPGs as one tool in this national approach.
- The current system is supposed to incorporate safeguards in the application and approval process, to ensure that services are provided in an equitable manner for cancer patients across all jurisdictions. However, the process should be more transparent (see point 3 in paragraph below)
- A separate capital funding program ensures that the amount of ROHPG payable reflects the current cost of equipment. These amounts are calculated based on a number of factors including; equipment specifications (including radiation shielding requirements), average equipment costs (supplied by manufacturer), exchange rate for the Australian dollar and, where applicable, an allowance for the cost of borrowing based on the Commonwealth 10-year bond rate.
- Maintaining ROHPG separately to the MBS allows for these factors to be incorporated in calculations and updated accordingly, reflecting current world finances.

The Faculty of Radiation Oncology believes that the ROHPG program can be further strengthened by addressing the following matters:

1. The list of approved equipment eligible for ROHPG is becoming outdated and there is no regular, transparent process for adding new equipment or technologies to this list, or for incorporating the incremental changes that represent the majority of technological improvements in radiation therapy equipment. For example, cone-beam CT (essential in the delivery of highly conformal high-dose radiation therapy), intensity modulated radiation therapy (IMRT), including volumetric arc techniques, planning and physics quality assurance systems are not currently funded.
2. CT simulator attendance threshold for HPG should be flexible depending on the number of linacs in the department.
3. The current process for assessing HPG license requests lacks transparency and engagement with existing providers. This process should be strengthened and should be more consultative.

The Faculty also supports the recommendation in the Baume Inquiry⁴ that the differences in the ROHPG process between public and private facilities should be minimised.

⁴ Baume P. A Vision for Radiotherapy. Report of the Radiation Oncology Inquiry. Canberra: Commonwealth of Australia, 2002

Table 1: Linear accelerators (linacs) across Australia

Linac Characteristic	2000⁵	2011⁶	2013⁷	2015⁸
By Year of Installation				
>10 years	14.0%	9.0%	6.5%	3.8%
>5 to 10 years	39.0%	28.3%	38.7%	42.3%
1 to 5 years	40.0%	60.7%	51.8%	50%
In the survey year	7.0%	2.1%	3.0%	3.8%
MLC (Multileaf collimation)				
Yes	74.2%	97.2%	98.8%	100%
No	25.8%	2.1%	1.2%	
No response		0.7%	-	
EPI (Electronic Portal Imaging)				
Yes	79.6%	92.4%	95.8%	99.5%
No	20.4%	5.5%	3.0%	0.5%
No response		2.1%	1.2%	
R&V (Record and Verify)				
Yes	91.4%	94.5%	99.4%	100%
No	8.6%	2.8%	0.6%	
No response		2.8%	-	
Cone Beam CT				
Yes		39.3%	58.7%	76.4%
No		58.6%	36.5%	23.6%
No response		2.1%	4.8%	
Tertiary Imaging/online correction				
Yes		63.4%	83.2%	91.8%
No		29.0%	12.0%	7.7%
No response		7.6%	4.8%	0.5%
Intensity Modulated Radiation Therapy (IMRT) Capable				
Yes		84.8%	93.4%	99.5%
No		15.2%	6.6%	0.5%

Addressing key issues raised as part of the 2016 Review of the Radiation Oncology Health Program Grants (ROHPG) Scheme⁹:

Purpose and benefits of the ROHPG scheme:

- The benefits of the current ROHPG program can be seen by contrasting the current average age of linacs in Australia to the average linac age 10 years ago – i.e. linacs in

⁵ Tripartite National Strategic Plan for Radiation Oncology (Australia), August 2001

⁶ In-house data from the RANZCR Faculty of Radiation Oncology self-reported facility-based census in 2011 (98% response rate)

⁷ In-house data from the RANZCR Faculty of Radiation Oncology self-reported facility-based census in 2013 (100% response rate)

⁸ In-house data from the RANZCR Faculty of Radiation Oncology self-reported facility-based census in 2015 (100% response rate)

⁹ 2016 Review of the Radiation Oncology Health Program Grants (ROHPG) Scheme. Available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/radonc-rohpg-review>; accessed on 29 February 2016

our country today are significantly younger and age is comparable between public and private radiation therapy providers

- ROHPG funding provides a strong incentive to replace the equipment once it has reached its expected throughput (typically after 10 years) while also helping to ensure that today's linacs are capable of delivering the most current treatment techniques
- Treatment availability is also improved through less down time and improved reliability of newer linacs.

Limitations of the current ROHPG scheme:

- The value of grants has not been updated in at least six years
- Lack of transparency in the granting of new licenses
- Not all radiation therapy treatment equipment is included in the scheme – for example skin cancer treatment machines are not included, nor cone-beam CT scans, nor physics quality assurance equipment
- The system has not adapted adequately to technology enhancements for contemporary treatment techniques and the associated capital equipment are not included in the current scheme, such as stereotactic radiosurgery, and stereotactic ablative radiation therapy.

Alternative funding models:

- The Faculty does not support the incorporation of HPGs into the MBS – as this would just be a return to the problems experienced in the past, prior to the introduction of the ROHPG scheme, with aged unreliable equipment limiting patient access. Also it would only see 85% of the schedule fee being reimbursed, which would equate to inadequate funding for appropriate equipment replacement
- The incorporation of capital funding into the MBS will also increase billing complexity, as is the case in diagnostic imaging
- RANZCR is not recommending any alternative model.

Equipment eligibility:

- Radiation oncology requires a nationally coordinated approach, taking into account the needs of all cancer patients, their families and carers
- Given the constant incremental change in technology, there needs to be an improved and regular process to deal with this in determining eligibility for ROHPG funding
- One suggestion is that there is a joint committee of the Commonwealth, States and Territories, with representatives of professional bodies of the main three professions involved in the provision of radiation therapy – i.e. The RANZCR Faculty of Radiation Oncology, The Australasian College of Physical Scientists and Engineers in Medicine (ACPSEM) and The Australian Institute of Radiography (AIR). Again, this calls for a nationally coordinated national approach.

Workforce considerations:

- Workforce issues are not particularly relevant to this scheme. However, if patient access becomes restricted, due to aged and less efficient equipment, this will have an impact on workforce, as well as on research and teaching

- The availability of trained radiation oncology medical physicists (ROMPs) remains a concern – there is a dire shortage of ROMPs across Australia and New Zealand
- Unless ROHPG funding is maintained, we would likely end up with ageing and unreliable equipment, requiring an increase in labour costs (overtime) – which would pose the risk of being unable to recruit and train an adequate physics workforce.

Linking funding to quality measures:

- The *Radiation Oncology Practice Standards*¹⁰ and *Supplementary Guide*¹¹, which were developed with funding from the (then) Department of Health and Ageing and released in 2011, provide a framework of requirements to assist a radiation therapy facility to achieve best practice across various domains (e.g. machine calibration, documentation, safety, and quality improvement)
- RANZCR considers the current MBS Review, as well as this review of the ROHPG Scheme, as an ideal opportunity to achieve national adoption of the Radiation Oncology Practice Standards across all jurisdictions, by linking a facility's compliance with the Practice Standards to its eligibility for ROHPG funding and MBS reimbursement.

Billing practice complexity:

- Although somewhat complex, the ROHPG scheme remains manageable
- RANZCR does not see the relative complexity of the ROHPG scheme as a reason for change, if it best supports high quality patient care, with optimal outcomes.

Existing supply / potential saturation of services:

- An estimated 48.3% of people diagnosed with cancer would benefit from radiation therapy at some point in their cancer journey¹², yet the actual utilisation rate in Australia ranges between 26%¹³ and 38%¹⁴.
- RANZCR is not aware of market saturation and there remain areas where we are concerned about limitation of supply in coming years with population growth and ageing. Any concerns about potential saturation on some metropolitan areas could be addressed or avoided by making the process of granting HPG licenses more transparent – including an opportunity for existing facilities to make representation

¹⁰ Radiation Oncology Practice Standards. Available at

http://www.ranzcr.edu.au/component/docman/?task=doc_download&gid=441

¹¹ Radiation Oncology Practice Standards Supplementary Guide. Available at

http://www.ranzcr.edu.au/component/docman/?task=doc_download&gid=982

¹² Barton M., Jacob S., Shafiq J., Wong K., Thompson S., Hanna T., Delaney G. National & International Benchmarks set following study of delivery of Radiotherapy Services: 'Review of Radiotherapy Optimal Utilisation Rates'. Collaboration for Cancer Outcomes Research and Evaluation (CCORE), Liverpool Hospital, Sydney, Australia, 2013: p6. Available from

www.inghaminstitute.org.au/sites/default/files/RTU%20Review%20Final%20Dec%202012%20v2%2019032013.pdf

¹³ Gabriel G, Barton M, Delaney G. Does travel distance affect radiotherapy utilisation in NSW and the ACT? Presentation at 2014 Innovations in Cancer Treatment and Care Conference. Available at

<http://www.cancerinstitute.org.au/events/innovations-in-cancer-treatment-and-care-2014/does-travel-distance-affect-radiotherapy-utilisation>

¹⁴ Morgan, G. Why has Radiotherapy Utilisation not improved since 1999? Journal of Medical Imaging and Radiation Oncology. 2011 August; Volume 55 (Number 4) p347-350

- Any changes to the ROHPG scheme which have a negative impact will likely have an even greater adverse impact on both public and private practices in regional areas. In the public sector, radiation oncology infrastructure (such as a linac) will typically represent a greater percentage of the smaller overall budget of a regional health service, when compared with that of a metropolitan health service. Similarly, in the private sector it is regional practices that often don't have the robust financial sustainability of more metropolitan practices
- A nationally coordinated approach is needed to oversee the provision of services and improve the utilisation of radiation therapy in Australia towards the optimal rate of approximately one in two cancer patients.

Conclusion:

RANZCR is very concerned that there may be changes being considered that would impact negatively on the ROHPG scheme, and hence affect patient access.

The scheme is working well and we would like to see it enhanced with strong processes to keep it modern, robust and linked to quality provision to ensure patient access to affordable quality radiation therapy in Australia.

To ensure that patients receive timely, optimal, affordable, high quality care:

- The financial impact of accessing cancer treatment should be minimised
- The ROHPG scheme should be maintained and enhanced to ensure that equipment remains current
- The ROHPG review should be coordinated with the MBS Review
- There should be national coordination of the radiation oncology sector to ensure progress towards the optimal utilisation rate for radiation therapy
- The Radiation Oncology Practice Standards should be mandated nationally, and compliance with the Standards linked to funding eligibility.

Radiation Oncology is a small medical specialty and very vulnerable to changes in the regulatory environment. RANZCR is concerned about the potentially negative impacts of multiple reviews or future changes in this area – i.e. not only the MBS Review (which we welcome) but also this review of the ROHPG scheme, as well as changes in funding at the state level.

These changes could very well result in a return to the problems of a decade or two ago, as outlined in the Baume Report¹⁵.

Any changes need to be coordinated, and the value of radiation therapy in the continuum of cancer care should be recognised.

The increasing incidence of cancer in Australia means that ROHPGs will play a vital role in maintaining radiation therapy capital equipment, especially the nation's fleet of linacs, within its agreed lifespan – and should be maintained.

¹⁵ Baume P. A Vision for Radiotherapy. Report of the Radiation Oncology Inquiry. Canberra: Commonwealth of Australia, 2002