

HOW RADIATION THERAPY WORKS BETTER FOR MANY AUSTRALIANS

Radiation therapy treatment of cancer offers significant patient benefits in four key ways:

1. As a primary curative treatment where either the stage of cancer means surgery is not possible (eg lung and cervix cancer) or as an alternative to surgery because of the different side effect profile (eg prostate cancer)
2. As an adjuvant therapy to reduce the risk of tumour recurrence or metastasis after surgery, as is typical with breast cancers;
3. As a salvage therapy, where there is evidence that surgery has not been fully effective; and,
4. If pain relief is needed during palliative care.

The question posed in RTAG's cost-benefit analysis of treatment for common cancers is whether the use of radiation therapy is both effective and good value compared to other treatments, particularly surgery. We looked at this in both the private and public hospital environments.

Key conclusions from our research includes:

- The dominant use of surgery for prostate cancer can look cost-effective if we exclude patient out-of-pocket costs, but once these are included, radiation therapy is much less expensive. Given that the difference in health outcomes (rate of recurrence) is minimal, radiation therapy should be presented to more patients as the more cost effective option;
- For cancers where surgery is strictly necessary (eg breast cancer) the impact of surgery in improving health outcomes is the more significant contribution. However, the addition of adjuvant radiation therapy is crucial to reduce the risk of recurrence, and the value of the increase in life expectancy is greater than the cost of the radiation therapy; and,
- Looking at salvage therapy, we similarly find that for prostate cancer, the value of increased life expectancy from post-surgery radiation therapy is much greater than the cost.

As a note of caution here, none of the data argues against the efficacy of surgery as a key cancer treatment. Rather they suggest two things:

- In many cases, a much less expensive and equally effective course of radiation therapy may be used; and,
- As a direct cost comparison, radiation therapy in many cases appears to be undervalued compared to surgery.

Alongside the direct cost comparison and individual health outcomes, there are other benefits which may accrue from greater availability of and better patient information on use of radiation therapy in Australia.

Some are individual benefits. For example the reduction in lost work time from outpatient radiation treatment, compared to hospitalisation and often lengthy recovery from surgery. The patient having a better understanding of their options and more control over the direction of their treatment is also individually welcome.

More broadly, there are general welfare benefits across the health system. By shifting patients from hospital to outpatient services, there are not only savings on individual treatments, but hospital capabilities are freed up for more urgent cases. This improves efficiency, reduces waiting time for cancer treatments and enables those who need surgery to get it quickly.

Moreover the reduction in recurrence from adjuvant or salvage therapies reduces hospital demand into the future. These types of savings will also be felt in the private sector, reducing upward pressure on private health insurance premiums: radiation therapy is predominantly an outpatient service.

RTAG's research has identified there are complex results when we examine the social price of cancer treatment across hospitals, private health insurance and the Medicare Benefits Schedule. For some cancers radiation therapy as a primary treatment is more cost-effective whereas for others it is less. But if we look at the total cost, including the out-of-pocket expenses to the patient, radiation therapy dominates surgery in a cost-benefit comparison.

There are a number of reasons why, but the most obvious is that there is significant cost-shifting to the private purse with surgery, which does not take place with radiation oncology. The consequence is that uninformed consumers – who are either unaware of the option of radiation therapy or who have no access to a treatment unit – are paying high personal costs for cancer treatment.

The drivers of this are inadequate supply of radiation therapy treatment resources in parts of the country, poor information radiation therapy, poor information for patients and low rates of referral to multidisciplinary teams for some cancers.

This is inequitable, no good for the taxpayer and bad for Australian cancer patients. It requires a better public policy debate. RTAG is committed to help drive that debate.