



7.12 Radiotherapy

Radiotherapy uses radiation directed at a localised area to kill or damage cancer cells. It is a well-established, effective and safe way to treat cancer and a small number of other conditions.

Radiotherapy is usually given as one of a series of outpatient treatments over a defined period, though under some circumstances patients may be treated as admitted patients. The optimal time frame for the treatment depends on whether it has a curative, prophylactic or palliative intent (see Glossary for definition of these treatment types).

There are several types of radiotherapy. The data in this snapshot relate to the most common form in Australia—megavoltage external beam radiotherapy, delivered by linear accelerator machines.

Radiotherapy activity

About 60,600 courses of radiotherapy began in 2015–16 (delivered at 44 public sector sites and 33 private sector sites). For these courses:

- 70% of patients starting a course of radiotherapy treatment were aged 60 and over
- breast, prostate and lung cancers were the most common reasons for radiotherapy
- more than half (58%) of the radiotherapy courses were intended to cure disease (curative), 38% were palliative and 1.1% were to prevent disease (prophylactic)
- there was a clear relationship between the age of the patient and whether the treatment was curative or palliative. The younger the patient, the more likely the treatment was intended to be curative (Figure 7.12.1)
- 2.0% of courses were clinically assessed as emergency treatment (that is, radiation treatment to begin within 24 hours), with most of these (96%) being palliative
- public providers delivered two-thirds (67%) of radiotherapy courses, while private providers delivered one-third (33%).

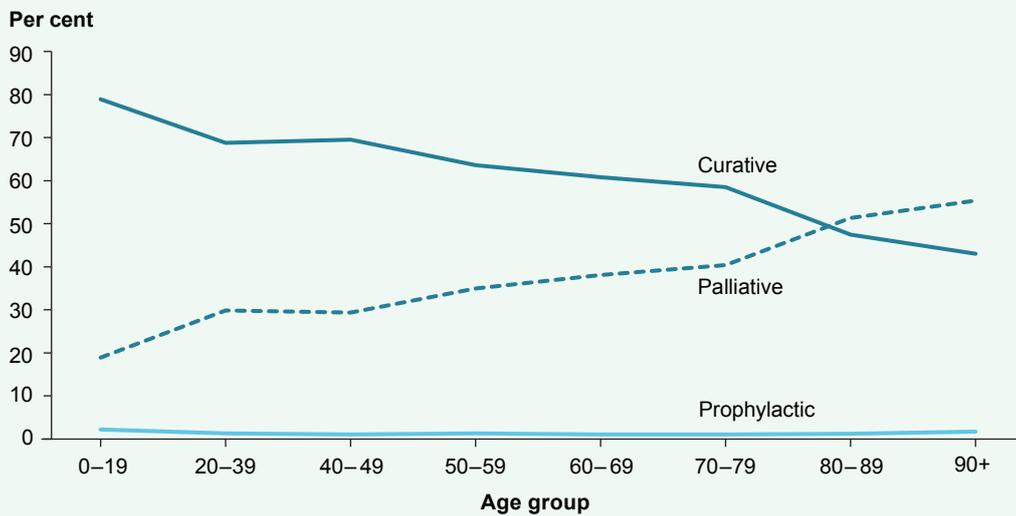
Radiotherapy waiting times

In 2015–16, 50% of patients received treatment within 9 days of being assessed as ready for care, and 90% received treatment within 27 days.

Waiting times were shortest for patients receiving palliative radiotherapy, and longest for patients receiving curative radiotherapy (Figure 7.12.2). Palliative patients are more likely to need less complex treatment techniques, so their treatment can generally be scheduled around that for other patients without causing major delay for those patients (RANZCR 2013).



Figure 7.12.1: Radiotherapy courses, by intention of treatment and age group, 2015–16



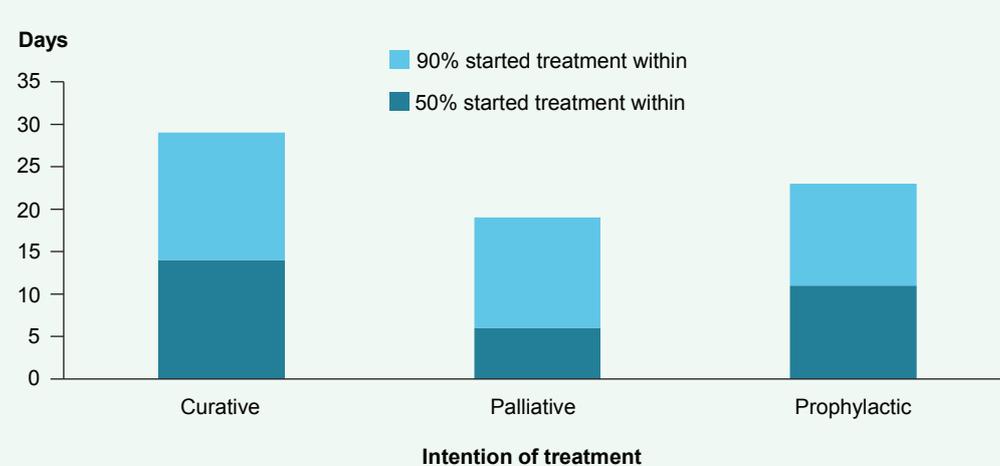
Source: AIHW 2017; Table S7.12.1.

For patients who were clinically assessed as emergency patients, 91% began treatment on the same or next day.

Waiting times for non-emergency courses were the same as for all courses, as most courses are non-emergency.

Of male patients with a principal diagnosis of prostate cancer, 50% started treatment within 10 days, and 90% within 29 days. Of female patients with a principal diagnosis of breast cancer, 50% started treatment within 8 days, and 90% within 28 days.

Figure 7.12.2: Radiotherapy waiting times by intention of treatment, 2015–16



Source: AIHW 2017; Table S7.12.2.



What is missing from the picture?

Other waiting periods—such as the times between contacts with a general practitioner, medical oncologist and radiation oncologist, and the time between the first consultation with a radiation oncologist and the patient becoming ready for care—are not collected.

Agreement on appropriate benchmark waiting periods for non-emergency patients (for example, those based on relevant clinical characteristics) would allow better reporting of the appropriateness of waiting times for radiotherapy.

Where do I go for more information?

More information on radiotherapy in Australia is available in the report [Radiotherapy in Australia, 2015–16](#), which can be downloaded for free.

References

AIHW (Australian Institute of Health and Welfare) 2017. Radiotherapy in Australia 2015–16. Cat. no. HSE 191. Canberra: AIHW.

RANZCR (The Royal Australian and New Zealand College of Radiologists) 2013. Management of waiting lists in radiation oncology: quality in the timeliness of patient care. Sydney: RANZCR.

