

# Cancer treatment—radiotherapy treatment type, code N[N]

## Identifying and definitional attributes

<b>Metadata item type:</b>	Data Element
<b>Short name:</b>	Radiotherapy treatment type
<b>Synonymous names:</b>	Radiotherapy treatment modality
<b>METEOR identifier:</b>	561521
<b>Registration status:</b>	<ul style="list-style-type: none"><li>• <a href="#">Health</a>, Standard 08/05/2014</li></ul>
<b>Definition:</b>	The type of <a href="#">radiotherapy</a> administered during the course of treatment for cancer, as represented by a code.
<b>Data Element Concept:</b>	<a href="#">Cancer treatment—radiotherapy treatment type</a>

## Value domain attributes

### Representational attributes

<b>Representation class:</b>	Code																
<b>Data type:</b>	Number																
<b>Format:</b>	N[N]																
<b>Maximum character length:</b>	2																
<b>Permissible values:</b>	<table><thead><tr><th>Value</th><th>Meaning</th></tr></thead><tbody><tr><td>1</td><td>External beam radiotherapy only</td></tr><tr><td>2</td><td>Brachytherapy only</td></tr><tr><td>3</td><td>Unsealed radioisotopes only</td></tr><tr><td>4</td><td>External beam radiotherapy and brachytherapy</td></tr><tr><td>5</td><td>External beam radiotherapy and unsealed radioisotopes</td></tr><tr><td>6</td><td>Brachytherapy and unsealed radioisotopes</td></tr><tr><td>7</td><td>External beam radiotherapy, brachytherapy and unsealed radioisotopes</td></tr></tbody></table>	Value	Meaning	1	External beam radiotherapy only	2	Brachytherapy only	3	Unsealed radioisotopes only	4	External beam radiotherapy and brachytherapy	5	External beam radiotherapy and unsealed radioisotopes	6	Brachytherapy and unsealed radioisotopes	7	External beam radiotherapy, brachytherapy and unsealed radioisotopes
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### Collection and usage attributes

**Guide for use:** More than one radiotherapy treatment type may be delivered during the course of treatment; select the appropriate code value.

The difference between the types of radiotherapy relates to the position of the radiation source:

- External beam radiotherapy (EBRT) is delivered by directing the radiation at the tumour from outside the body
- Brachytherapy or sealed source radiotherapy is delivered by placing the radiation source in close proximity to the tumour site
- Unsealed radioisotopes or systemic radioisotope therapy is delivered by infusion into the bloodstream or by ingestion and is a form of targeted therapy.

## Source and reference attributes

**Submitting organisation:** Cancer Australia

**Reference documents:** DeVita VT, Hellman S, Rosenberg SA 2005. Cancer: Principles and practice of oncology, 7th edition. Philadelphia: Lippincott Williams & Wilkins

## Data element attributes

### Collection and usage attributes

**Guide for use:** External beam radiotherapy (EBRT) is delivered by directing the radiation at the tumour from outside the body. Types of external beam radiotherapy include conventional EBRT, intensity modulated radiation therapy (IMRT) and 3-dimensional conformal radiotherapy (3D-CRT).

Brachytherapy is delivered by placing the radiation source in close proximity to the tumour site. The radioactive isotopes are sealed in tiny pellets or “seeds” which are placed in the body using delivery devices such as needles or catheters. Types include interstitial brachytherapy, which uses a source placed within tumour tissue, for example, within a prostate tumour; and intracavitary brachytherapy, whereby the source is placed within a surgical cavity or a body cavity. Brachytherapy can involve the temporary or permanent placement of radioactive sources.

Unsealed radioisotopes or systemic radioisotope therapy is delivered by infusion into the bloodstream or by ingestion and is a form of targeted therapy. Targeting can be due to the chemical properties of the isotope, for example, radioiodine is specifically absorbed by the thyroid gland. It can also be achieved by attaching the radioisotope to another molecule or antibody to guide it to the target tissue. Examples of treatment with unsealed radioisotopes include the infusion of metaiodobenzylguanidine (MIBG) to treat neuroblastoma and of oral iodine-131 to treat thyroid cancer.

Radiotherapy treatment type is collected for all courses of radiotherapy delivered to the patient during the course of treatment.

The radiotherapy treatment type is recorded regardless of whether the course of treatment is completed as intended, and regardless of the intent or timing of treatment.

More than one radiotherapy treatment type may be administered during the course of treatment; select the appropriate code value.

If external beam radiotherapy and/or brachytherapy were administered, the radiation dose received and number of fractions should also be collected as well as the start and finish dates of the radiotherapy.

Most external beam radiotherapy is delivered on an outpatient basis.

Brachytherapy is likely to be delivered to admitted patients.

**Collection methods:** The radiotherapy treatment modality will typically be found in the radiation oncologist's summary letter for the course of treatment or in the radiotherapy treatment summary in the patient's medical record.

Determining the treatment modality may require assistance from the radiation oncologist for consistent coding.

**Comments:** To evaluate patterns of radiotherapy care and analyse patient outcomes, it is necessary to know which treatment modalities were employed in the delivery of treatment.

## Source and reference attributes

**Submitting organisation:** Cancer Australia

**Origin:** Commission on Cancer, American College of Surgeons  
New South Wales Health Department

**Reference documents:** American College of Surgeons 2002. Facility Oncology Registry Data Standards (FORDS), 2009 revision. Commission on Cancer

American College of Surgeons 1998. Standards of the Commission on Cancer: Registry Operations and Data Standards (ROADS), Volume II. Commission on Cancer

Cancer Institute NSW 2006. NSW Clinical Cancer Registration: Minimum Data Set Data Dictionary, version 1.9 draft

## Relational attributes

**Related metadata references:** See also [Cancer treatment—external beam radiotherapy type, code N\[N\]](#)

- [Health](#), Standard 04/02/2015

See also [Cancer treatment—radiation dose administered, total Gray N\[NN.NN\]](#)

- [Health](#), Standard 08/05/2014

See also [Cancer treatment—radiotherapy completion date, DDMMYYYY](#)

- [Health](#), Standard 08/05/2014

See also [Cancer treatment—radiotherapy fractions administered, total fractions N\[N\]](#)

- [Health](#), Standard 08/05/2014

See also [Cancer treatment—radiotherapy start date, DDMMYYYY](#)

- [ACT Health \(retired\)](#), Candidate 08/08/2018
- [Health](#), Standard 08/05/2014

See also [Cancer treatment—radiotherapy target site, code N\[N\]](#)

- [Health](#), Standard 08/05/2014

Supersedes [Cancer treatment—radiotherapy treatment type, code N\[N\]](#)

- [Health](#), Superseded 08/05/2014

**Implementation in Data Set Specifications:**

[Radiotherapy for cancer clusterHealth](#), Standard 08/05/2014