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Radiation Therapy

Adjudication Rule

Table of content

Approved by:
Daman

Responsible:
Medical Strategy & Development Department

Related Adjudication Rules:
None

Abstract

For Members

Radiation therapy also known as radiotherapy is the medical use of beams of radiation, to destroy or damage cancer cells, which prevents these cells from multiplying with little harm to nearby healthy tissues. Radiotherapy is usually given as a series of treatments over a number of days or weeks. Each treatment is known as a fraction. Radiation therapy can be given as external radiation, as internal radiation, or as systemic radiation. In some cases more than one type is used.Sometimes radiotherapy is used in addition to another main treatment like surgery or chemotherapy.

Daman covers radiation therapy if medically indicated as per best medical practice standards and as per the policy terms and conditions of each health insurance plan administered by Daman.

For Medical Professionals

Radiation therapy involves treating cancerous disease with penetrating beams of high-energy radiation which works by depositing energy within the cells of the treated area. This causes irreparable damage to the cell's DNA. Sensitivity to Radiotherapy varies with different tumour types which is why a range of doses and schedules are used. The process of Radiotherapy is complex and involves understanding the principles of medical physics, radiobiology, radiation safety, dosimetry, radiation treatment planning, simulation and interaction of radiation with other treatment modalities. There are lifetime dose limits of radiation. Radiotherapy is recommended for those patients in whom the benefits outweigh the possible side effects. The length of the treatment course depends on site, size and type of the cancer.

Daman covers radiation therapy if medically indicated as per best medical practice standards and as per the policy terms and conditions of each health insurance plan administered by Daman.

Scope

The AR defines the appropriate criteria for the delivery of external and internal types of radiotherapy. It covers the documentation requirements to support clinical superiority of radiotherapy methods. The AR focuses only on radiotherapy for cancerous disease. Different modalities of radiotherapy used for cancer treatment are:

1. External beam radiotherapy (EBRT)
2. Internal radiotherapy (Brachytherapy)

Adjudication Policy

Eligibility / Coverage Criteria

Daman covers radiotherapy services that are considered to be medically reasonable and necessary as per the indications given below:

1. Common indications of Radiotherapy (EBRT and Brachytherapy): [9]
   - Head and neck tumors
   - Brain and Spinal tumors
   - Thoracic and abdominal malignancies
   - Pelvic and retroperitoneal tumors
   - Breast cancer
   - Prostate cancer
2. Indications specific to external beam therapy techniques (in addition to common indications)
   - **SRS indications**: [1, 7, 8]
     - Primary malignancies of the central nervous system for lesions <5cm.
     - Metastatic brain or spinal lesions, with stable systemic disease, Karnofsky Performance Status 40 or greater and other reasonable survival expectations, or ECOG status of 3 or less
     - Primary and secondary malignant tumours of brain, single and multiple, residual tumor cells following surgery, intracranial, orbital and base-of-skull tumors with immediately adjacent bony structures.
   - **SBRT indications**:
     - Tumors of any type arising in or near previously irradiated regions
     - Recurrent pelvic, head and neck tumours after primary irradiation when and only each of the following criteria are met, and each specifically documented in the medical record:
       - The patient's general medical condition (notably, the performance status) justifies aggressive treatment to the cancer
       - The tumour burden can be completely targeted with acceptable risk to critical normal structures
   - **Intensity modulated radiation therapy (IMRT) indications**:[1, 13]
     - Left sided breast cancer with close proximity to critical cardiac and pericardial structures (less frequently necessary for tumors of the right breast)
     - Primary, metastatic tumors of the spine where the spinal cord tolerance may be exceeded with conventional treatment
     - IMRT may also be beneficial for treating paediatric malignancies.
     - Re-irradiation of regions listed in indications.

     Intensity modulated radiation therapy (IMRT) is considered medically necessary and, therefore, covered when all of the following criteria are met:
     - IMRT is not a replacement for conventional or three dimensional conformal radiation therapy.
     - Sparing surrounding normal tissue is of added benefit.
   - **Particle beam therapy indications** [9]
     - Proton beam therapy (PBT) is indicated:
       - For spinal tumours and tumours at the base of the skull.
       - To reduce the risks of late effects, including second cancers and cardiovascular risk, which are particularly relevant when treating children and young adults.
     - Neutron beam therapy (NBT) may be appropriate for the following sites, depending on stage and histology:
       - Prostate tumours - Bulky T2, or T3 or T4 tumours
       - Soft tissue tumours
       - Bone and cartilage tumours
       - Large tumours and metastatic neutron-sensitive tumours
       - Melanoma
3. Indications specific to brachytherapy (in addition to common indications)
   - Appropriate for men who have low risk early stage prostate cancer disease.
   - Skin cancer
   - Soft tissue sarcoma

Brachytherapy is indicated in certain clinical scenarios:

- Retreatment of previously treated areas
- As a boost to external treatment

Documentation Requirements

The medical records should reflect the medical necessity and appropriateness of the diagnostic and/or therapeutic services provided along with the site of service. The radiation oncology reports should include:

1. Standard history and physical, patient's functional status.
2. The TNM classification of the tumor(s) and the staging (if available).
3. Current performance status (Karnofsky Performance Status or ECOG Performance Status).
4. Results of diagnostic tests
5. Treatment options, including the intent of therapy (e.g., cure, adjuvant, palliation, local control). Also document the risks/benefits and prognosis.
6. Treatment planning, management/delivery should be documented by radiology oncologist.
7. Treatment dates and treatment status (course of therapy completed, changed or suspended).
8. The treatment summary key elements should include at least the following elements

External beam applications	Brachytherapy applications
Beam description	Isotope
Total dose	Dates of delivery
Treatment fractions	Dose to volumes of interest
Dose to tumor/target volumes	Dose specification points/regions.
Any key regions (including nodal areas and key organs)	Treatment type [e.g.: high-dose/low-dose (HDR/LDR),permanent/temporary]
Follow up plans including subsequent follow up visits, referrals, instructions and diagnostic studies.	

Requirements for Coverage

ICD and CPT codes must be coded to the highest level of specificity.

Non-Coverage

When the documentation does not meet the criteria for the service rendered, such services will be denied as not reasonable and necessary.

- Follow-up visits for 90 days are not separately covered for brachytherapy [10].
- Patients who have had transurethral prostatic resection (TURP) previously are not eligible for the brachytherapy procedure because complication rates are increased.
- Traditional "field-in-field technique," which is neither MLC (Multi-leaf collimator) nor compensator-based, is not considered IMRT but rather external beam therapy.
- Proton beam therapy is not covered for cancers that are widely disseminated, have haematogenous metastases, or as a short term palliative procedure.

Payment and Coding Rules

Please apply HAAD payment rules and regulations and relevant coding manuals for ICD, CPT, etc.

Note: ICD codes for encounter for radiation therapy (V58.0/ Z51.0) should only be used as principal diagnosis, followed by the reason of radiation therapy as a secondary diagnosis.

Current Procedural Terminology (CPT) listings for external beam therapy and brachytherapy include initial consultations, clinical treatment planning, simulation, medical radiation physics, dosimetry, treatment devices, special services, and clinical treatment management procedures. They include normal follow-up care during course of treatment and for three months following its completion.

General Rules

Consultation: Clinical Management [5, 11]
Preliminary consultation, evaluation of patient prior to decision to treat, or full medical care (in addition to treatment management) when provided by the treatment radiologist may be identified by the appropriate procedure codes from Evaluation and Management, Medicine or Surgery sections.

Approve E/M codes, when there is evidence of	Exclusions - E/M services cannot be reported when billing the following
Counselling/ Coordinating care	Treatment management codes-
Other aspects of cancer (i.e. pain or nutrition management)	Intracavitary radiation source application codes
Diagnostic testing for staging	Interstitial radiation source application codes (LDR)

Frequency of Service

Each patient's condition and response to treatment must medically warrant the number of services reported for payment. Patients usually receive radiation treatments once a day, five days a week for a total of two to nine weeks. The patient's diagnosis determines the total duration of treatment. Occasionally, treatments are given twice

a day. Frequency in excess of this value will require supporting documentation.

- Radiation treatment that exceeds 5 sessions is not covered as SBRT [8].
- SRS is 1 fraction in the brain [11]
- In most ocular cancers, the total dose of proton beam radiation is divided into daily fractions (usually given Monday thru Friday) over several weeks [6].
- Brachytherapy is delivered in 3-5 treatments. 10 separate HDR brachytherapy treatments over one or more weeks may be delivered [4, 10]

Adjudication Examples

Example 1

Question: A claim received with SBRT Treatment delivery and Other Radiation Treatment delivery). Is it appropriate to pay this claim?

Answer: No, as per the CPT guidelines, SBRT Treatment delivery should not be used in conjunction with Other Radiation Treatment delivery.

Example 2

Question: A patient has undergone brachytherapy in which X-rays are used for the simulation. The claim has been submitted with radiology port films. Is it appropriate to approve the claim?

Answer: No, this claim should be rejected, although x-rays may be used in brachytherapy simulation, but should not be reported as port films.

Example 3

Question: A 50 year old man with prostate cancer is recommended to undergo a Proton beam radiation therapy using 2 isocenters. Claim is submitted with the CPT code for the same. Is it appropriate to approve the claim?

Answer: Yes, since the therapy is done using isocenters.

Example 4

Question: A patient has undergone a conventional clinical treatment planning and IMRT treatment planning on the same day. A claim is submitted with the CPT code for IMRT treatment planning only. Is it appropriate to approve the claim?

Answer: Ye, It is payable. As per the coding guidelines, IMRT treatment planning includes any kind of treatment planning.

Denial codes

Code	Code description
MNEC-003	Service is not clinically indicated based on good clinical practice.
MNEC-004	Service is not clinically indicated based on good clinical practice, without additional supporting diagnosis/activities.
NCOV-003	Service(s) is (are) not covered.
NCOV-001	Diagnosis (es) is (are) not covered.
PRCE-002	Payment is included in the allowance for another service.

Appendices

A. References

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15. ICD-9-CM Official Guidelines for Coding and Reporting

B. Revision History

Date	Change(s)
01-11-13	N.A
15-07-14	1. V1.1 2. Disclaimer updated as per system requirements 3. Payment and billing rules updated