Sentara Health Plans

Commercial

Radiation Therapy for Non-oncologic Indications, Medical 351

Table of Content

Description & Definitions
Criteria
Document History
Coding
Special Notes
References
Keywords

Effective Date	8/1/2026
Next Review Date	4/2027
Coverage Policy	Medical 351
Version	3

Member-specific benefits take precedence over medical policy and benefits may vary across plans. Refer to the individual's benefit plan for details.

Description & Definitions:

Radiation Therapy for Non-oncologic (non-cancerous or malignant) **indications** delivers radiotherapy for nonmalignant diseases, inflammatory conditions, and neurological disorders.

Low Dose Radiation Therapy (LDRT): administering smaller amounts of radiation compared to traditional high-dose therapy (IMRT, SBRT) to achieve anti-inflammatory effects and pain relief.

Intensity Modulated Radiation Therapy (IMRT): high radiation dose in smaller does over a longer duration for precision.

Stereotactic Body Radiation Therapy (SBRT): high radiation doses with a shorter duration.

Other common names: Radiation therapy (RT), Non-oncological radiotherapy

** NOTE: this policy does not cover any surgical procedures

Criteria:

RADIATION THERAPY is considered medically necessary for **1 or more** of the following:

- **Initial treatment** for Non-oncologic (non-malignant) conditions, to include **1 or more** of the following:
  - **Acoustic neuroma** (Vestibular Schwannoma)
  - **Choroidal hemangioma**
  - **Craniopharyngioma**
  - **Dupuytren's contracture** (fibromatosis)

- **Extramedullary hematopoiesis** (hypersplenism)
- **Glomus tumor**
- **Gorham-Stout syndrome** (disappearing bone syndrome)
- **Graves' ophthalmopathy** (also known as Thyroid eye disease (TED))
- **Gynecomastia**
- **Hemangioblastoma**
- **Hemangiomas** (brain, spinal cord, subglottis, glottis, liver, GI tract, urinary tract, joints and orbit)
- **Heterotopic ossification (HO)**
- **Hypersalivation of amyotropic lateral sclerosis (ALS)**
- **Hyperthyroidism**
- **Langerhans cell histiocytosis** (LCH), (eosinophilic granuloma)
- **Meningioma**
- **Paraganglioma** (chromaffin positive)
- **Peyronie's disease** (morbus peronie, induratio penis plastica)
- **Pineocytoma**
- **Pituitary adenoma**
- **Precancerous melanosis**
- **Pterygium**
- **Steward's disease** (lethal midline granuloma)
- **Schwannoma**

- **Initial treatment** for Non-oncologic (non-malignant) conditions when there is **failure or contraindication to established medical and surgical treatment** to include **1 or more** of the following:
  - **Aneurysmal bone cyst** *as the last resort*
  - **Angiofibroma of nasopharynx** (juvenile nasopharyngeal angiofibroma) with extension into the orbital apex or base of skull *for unresectable disease*
  - **Angiomatosis retinae** (von Hippel Lindau syndrome): beta plaque
  - **Bowen's disease** (squamous cell carcinoma in situ) *when alternatives (surgery, electrodessication and curettage, topical 5FU) are not possible*
  - **Carcinoid tumor** *for unresectable non-secretory, or secreting tumors*
  - **Castleman's disease** (giant lymph node hyperplasia),orbital pseudotumor and Waldeyer's ring *for unresectable or refractory or relapsed of Steroids are indicated as initial management or contraindicated.*
  - **Choroid plexus papilloma** *for unresectable disease*
  - **Desmoid tumor** *for inoperable cases, unresectable disease*
  - **Giant cell tumor of bone** (osteoclastoma) *for unresectable disease*
  - **Erythroplasia of Queyrat** *if topical agents is contraindicated*
  - **Inverted papilloma** *incomplete resection or suspected malignant component*
  - **Keloid scars Prevention** with **All of the following**:
    - Approved for surgical excision of keloids (additional codes 15786, 15787)
    - Adjunctive therapy immediately following excisional surgery (within 7 days)
  - **Lymphangiomas** (capillary, cavernous, cystic hydromas, lymphangial, hemangiomas) *refractory lesions with repeated recurrence after resection*
  - **Neurosarcoidosis** for *refractory or relapsed of Steroids are indicated as initial management or contraindicated conservative treatments of symptoms.*
  - **Non-cutaneous neurofibromas** lesions *for unresectable disease*
  - **Orbital myositis** *for refractory or relapsed of Steroids are indicated as initial management or contraindicated.*
  - **Orbital pseudotumor** (lymphoid hyperplasia) *recur after surgery, or become refractory or relapsed of Steroids are indicated as initial management or contraindicated.*
  - **Parotid adenoma** *for > 4 cm, positive margin status, and multinodularity*
  - **Pinealoma** (pineal parenchymal tumors) for p*ostoperative radiation for incomplete resection*
  - **Plantar fasciitis/ fibromatosis**

- **Prophylactic Cranial Irradiation** (PCI) with **All of the following**:
  - Individual had a good response to initial therapy
  - Eastern Cooperative Oncology Group (ECOG) Performance Status score) ≤2
- **Rosai-Dorfman disease** *for lesions involving the airway not responding to more conservative measures*
- **Splenomegaly** *secondary to either a myeloproliferative disorder, cirrhosis, or Leukemia*
- **Tolosa-Hunt syndrome** (episodic orbital pain) *recur after surgery, or become refractory or relapsed of Steroids or Methotrexate are indicated as initial management or contraindicated.*
- **Total Body Irradiation (TBI)** *used as preparation of an individual for bone marrow or stem cell transplant*
- **Total lymphoid irradiation** *in situations of chronic rejection*
- **Trigeminal neuralgia** *for refractory or relapsed of Antiseizure or Muscle relaxants are indicated as initial management or contraindicated.*
- **Trochanteric bursitis**
- **Villonodular synovitis** *for recurrent after resection, or diffuse or bulky disease-causing bone destruction, tenosynovial giant cell tumor*
- **Degenerative skeletal and joint disorders** with **ALL of the following**:
  - **Osteoarthritis**
  - Individual is at least 60 years of age
  - Individual has had an inadequate response to non-pharmacologic therapies (eg, physical therapies)
  - Individual has had an inadequate response, intolerable adverse event, or contraindication to pharmacologic therapies (eg, topical and systemic analgesics, intra-articular glucocorticoids)
  - Individual has had a consultation/evaluation completed by an orthopedic surgeon and was considered to have disease advanced enough for joint replacement, but was deemed to be medically inoperable

- **Additional treatments** for Non-oncologic (non-malignant) conditions may be considered for medically necessary with **1 or more** of the following conditions:
  - **Osteoarthritis** may be considered for with **All of the following** criteria:
    - Individual is at least 60 years of age
    - Individual has had a consultation/evaluation completed by an orthopedic surgeon and was considered to have disease advanced enough for joint replacement, but was deemed to be medically inoperable
    - Individual has had an inadequate response to non-pharmacologic therapies (eg, physical therapies)
    - Individual has had an inadequate response, intolerable adverse event, or contraindication to pharmacologic therapies (eg, topical and systemic analgesics, intra-articular glucocorticoids)
    - Request for additional treatment must be after **1 or more** of the following:
      - 6-8 weeks from initial treatment for conditions of the extremities
      - 6 months from initial treatment for conditions of the central (head/neck, chest, thorax, spine, pelvis/hips) indications.
  - **Plantar fasciitis/fibromatosis** may be considered for with **All of the following** criteria:
    - Individual has had an inadequate response, intolerable adverse event, or contraindication to pharmacologic therapies (eg, topical and systemic analgesics, intra-articular glucocorticoids);
    - Request for additional treatment must be after 6-8 weeks from initial treatment
  - **Dupuytren's disease** may be considered for with **All of the following** criteria:
    - Individual has had an inadequate response, intolerable adverse event, or contraindication to pharmacologic therapies (eg, topical and systemic analgesics, intra-articular glucocorticoids);
    - 6-8 weeks from initial treatment

RADIATION THERAPY for Non-oncologic (non-malignant) conditions is considered **not medically necessary** for **ANY use other** than those indicated in clinical criteria, to include, but not limited to:

- Abortion

- Acne
- Adamantinoma (ameloblastoma)
- Amyloidosis
- Ankylosing spondylitis
- Anovulation
- Arachnoiditis
- Castration
- Corneal vascularization
- Corneal xanthogranuloma
- Cutaneous neurofibroma
- Depression/ OCD
- Fibrosclerosis (sclerosing disorders)
- Gas gangrene
- Herpes zoster
- Hidradenitis suppurativa
- Infections (bacterial)
- Infections (fungal and parasitic)
- Inflammatory (acute/chronic) disorders not responsive to antibiotics (furuncles, carbuncles, sweat gland abscesses)
- Juvenile xanthogranuloma
- Keratitis (bullous and filamentary)
- Macular degeneration
- Ocular trichiasis (epilation)
- Osteoid osteoma (osteoblastoma, giant osteoid osteoma)
- Otitis media
- Pancreatitis
- Parotitis
- Peptic ulcer disease
- Perifolliculitis (scalp)
- Persistent lymphatic fistula
- Plasma cell granuloma (benign)
- Pregnancy
- Psoriasis
- Psychiatric disorders
- Pyogenic granuloma
- Rheumatoid arthritis
- Sinusitis
- Thyroiditis
- Tonsillitis
- Tuberculosis lymphadenitis
- Vernal catarrh
- Warts

Document History:

Revised Dates:

- 2026: April – Implementation date of August 1, 2026. Added criteria for Additional treatments of Osteoarthritis, Plantar fasciitis/ fibromatosis and Dupuytren's disease.

Reviewed Dates:

Origination Date: 12/2025 - Effective Date: April 1, 2026

Coding:

Medically necessary with criteria:

Coding	Description
77373	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
77401	Radiation treatment delivery, superficial and/or ortho voltage, per day
77402	Radiation treatment delivery, => 1 MeV; simple
77407	Radiation treatment delivery, => 1 MeV; intermediate
77412	Radiation treatment delivery, => 1 MeV; complex 77431 - Radiation therapy management with complete course of therapy consisting of 1 or 2 fractions only
77427	Radiation treatment management, 5 treatments
77431	Radiation therapy management with complete course of therapy consisting of 1 or 2 fractions only
77432	Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session) ?
77435	Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions ?
77436	Surface radiation therapy; superficial or orthovoltage, treatment planning and simulation-aided field setting
77437	Surface radiation therapy; superficial, delivery, ≤150 kV, per fraction (eg, electronic brachytherapy)
77438	Surface radiation therapy; orthovoltage, delivery, >150-500 kV, per fraction
77439	Surface radiation therapy; superficial or orthovoltage, image guidance, ultrasound for placement of radiation therapy fields for treatment of cutaneous tumors, per course of treatment (List separately in addition to code for primary procedure)
77469	Intraoperative radiation treatment management

77600	Hyperthermia, externally generated; superficial (ie, heating to a depth of 4 cm or less) superficial radiation hyperthermia treatment
77470	Special treatment procedure (eg, total body irradiation, hemibody radiation, per oral or endocavitary irradiation)

Considered Not Medically Necessary:

Coding	Description
	None

U.S. Food and Drug Administration (FDA) - approved only products only.

The preceding codes are included above for informational purposes only and may not be all inclusive. Additionally, inclusion or exclusion of a treatment, procedure, or device code(s) does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

Special Notes: *

- Coverage:
  - See the appropriate benefit document for specific coverage determination. Member specific benefits take precedence over medical policy.
- Application to products
  - Policy is applicable to Sentara Health Plan Commercial products.
  - Refer to OncoHealth for cancer radiation treatments
- Authorization requirements
  - Pre-certification by the Plan is required.
- Special Notes:
  - Commercial
    - Medical policies can be highly technical and complex and are provided here for informational purposes. These medical policies are intended for use by health care professionals. The medical policies do not constitute medical advice or medical care. Treating health care professionals are solely responsible for diagnosis, treatment, and medical advice. Sentara Health Plan members should discuss the information in the medical policies with their treating health care professionals. Medical technology is constantly evolving, and these medical policies are subject to change without notice, although Sentara Health Plan will notify providers as required in advance of changes that could have a negative impact on benefits.
    - Services mean both medical and behavioral health (mental health) services and supplies unless We specifically tell You otherwise. We do not cover any services that are not listed in the Covered Services section unless required to be covered under state or federal laws and regulations. We do not cover any services that are not Medically Necessary. We sometimes give examples of specific services that are not covered but that does not mean that other similar services are covered. Some services are covered only if We authorize them. When We say You or Your We mean You and any of Your family members covered under the Plan. Call Member Services if You have questions.

References:

Specialty Association Guidelines; Government Regulations; Winifred S. Hayes, Inc; UpToDate; Literature Review; Specialty Advisors; National Coverage Determination (NCD); Local Coverage Determination (LCD).

Federal Register. Daily Journal of the United States Government. Radiological Health Regulations; Amendments to Records and Reports for Radiation Emitting Electronic Products; Amendments to Performance Standards for Diagnostic X-ray, Laser, and Ultrasonic Products. 1.20.2023. Retrieved 3.26.2026. https://www.federalregister.gov/documents/2023/01/20/2023-00922/radiological-health-regulations-amendments-to-records-and-reports-for-radiation-emitting-electronic

US Food and Drug Administration. FDA.gov. Center for Devices and Radiological Health (CDRH). 1.24.2024. Retrieved 3.26.2026. https://www.fda.gov/about-fda/fda-organization/center-devices-and-radiological-health

Symplr Evidence Analysis. Formally Hayes Rating. Evidence Analysis Research Brief. Mar 13, 2026. Low-Dose Radiation Therapy for Treatment of Hand Osteoarthritis. Retrieved 3.27.2026. https://evidence.hayesinc.com/report/earb.ldrtforhoa6250

Symplr Evidence Analysis. Formally Hayes Rating. Evidence Analysis Research Brief. Feb 21, 2024. Radiation Therapy for Prevention of Keloid Scarring. Retrieved 3.27.2026. https://evidence.hayesinc.com/report/earb.keloid5803

Symplr Evidence Analysis. Formally Hayes Rating. Evolving Evidence Review. Annual Review: Dec 12, 2025. Low-Dose Radiation Therapy for Treatment of Knee Osteoarthritis. Retrieved 3.27.2026. https://evidence.hayesinc.com/report/eer.lowdose5964

Centers for Medicare and Medicaid Services. CMS.gov. Local Coverage Determination (LCD). Radiation Therapies. L39553. 12.18.2025. Palmetto. Retrieved 3.27.2026. https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=39553&ver=24&

Commonwealth of Virginia. Department of Medical Assistance Services. DMAS.gov. Procedure Fee Files & CPT Codes. 2026. Retrieved 3.27.2026. https://www.dmas.virginia.gov/for-providers/rates-and-rate-setting/procedure-fee-files-cpt-codes/#searchCPT

American Society for Radiation Oncology. ASTRO. Low-dose radiation therapy offers substantial relief to people with painful knee osteoarthritis
Placebo-controlled clinical trial finds non-invasive radiation treatment offers a conservative alternative to medications, joint surgery. 9.28.2025. Retrieved 3.27.2026. https://www.astro.org/news-and-publications/news-and-media-center/news-releases/2025/low-dose-radiation-therapy-offers-substantial-relief-to-people-with-painful-knee-osteoarthritis

International Organization for Radiotherapy for Benign Conditions. Koneru B, Sick J, Shaikh H et al., Low-Dose Radiation Therapy for Osteoarthritis: A Retrospective Single-Institution Analysis of 69 Patients and 168 Joints. International Journal of Radiation Oncology, Biology, Physics, 2025; 123, 352-360. Retrieved 3.27.2026.
https://www.redjournal.org/action/showCitFormats?doi=10.1016%2Fj.ijrobp.2025.04.040&pii=S0360-3016%2825%2900439-0

PubMed. National Library of Medicine. Hoveidaei, A., Karimi, M., Salmannezhad, A., Tavakoli, Y., Taghavi, S. P., & Hoveidaei, A. H. (2025). Low-dose Radiation Therapy (LDRT) in Managing Osteoarthritis: A Comprehensive Review. Current therapeutic research, clinical and experimental, 102, 100777. February 2025. Retrieved 3.27.2026. https://pubmed.ncbi.nlm.nih.gov/40177366/

PubMed. National Library of Medicine. Martin, J. M., Bajaj, G. K., Guckenberger, M., Ha, T., Jereczek-Fossa, B. A., Kriz, J., Vapiwala, N., & Keole, S. (2026). Radiation Therapy for Nonmalignant Diseases: An ASTRO-ESTRO-DEGRO-RANZCR Framework. International journal of radiation oncology, biology, physics, 124(3), 595–602. Retrieved 3.27.2026. https://pubmed.ncbi.nlm.nih.gov/41027546/

OncoDaily. Radiotherapy Blog. November 29, 2025. The Power of Radiotherapy in Non-Malignant Conditions. Retrieved 3.27.2026. https://oncodaily.com/oncolibrary/radiotherapy/benign_radiotherapy

US Department of Veterans Affairs. Evidence Synthesis. Radiation Therapy for Benign Conditions. March 2024. Retrieved 3.27.2026. https://www.hsrd.research.va.gov/publications/esp/Radiation-Benign-Conditions.pdf

Evolent (NIA) Clinical guidelines: NON-CANCEROUS CONDITIONS. CG 135. January 2024. Retrieved 3.27.2026. https://www1.radmd.com/sites/default/files/2024-07/Non-Cancerous%20Conditions%20RadOnc%202024.pdf

EviCore Radiation Oncology Clinical Guidelines. Non-Malignant Disorders. 2.25.2026. Retrieved 3.27.2026. https://www.evicore.com/sites/default/files/clinical-guidelines/2026-01/EviCore_Radiation%20Oncology_V2.0.2026_Eff02.25.2026_Pub01.15.2026.pdf

MCG Informed Care Strategies. 29th Edition. 2025. Retrieved 3.27.2026. https://careweb.careguidelines.com/ed29/index.html

Keywords:

Radiation Therapy for Non-oncologic, Low Dose Radiation Therapy (LDRT), Intensity Modulated Radiation Therapy (IMRT). Stereotactic Body Radiation Therapy (SBRT). Radiation therapy (RT), Non-oncological radiotherapy