

Proton Beam Radiation Therapy Policy

Purpose

To describe the CVS Health Radiation Oncology Policy for Proton Beam Radiation Therapy (PBRT).

Scope

The scope of this document applies to CVS Health clients who have signed up for the CVS Radiation Oncology program under CVS Health Solutions. This document includes the details for the PBRT policy.

Policy

CVS Health considers proton beam radiation therapy (PBRT) medically necessary for the curative treatment of many tumor types.

Procedure

CVS Health considers proton beam radiotherapy (PBRT) medically necessary for the curative treatment of *any* of the following tumors:

- I.Primary CNS tumors; *or*
- II.Head and neck tumors (T4 or unresectable; excluding T1-T2N0M0 laryngeal cancer); *or*
- III.Paranasal sinus, other accessory sinus, or nasopharyngeal tumors; *or*
- IV.Skull-based tumors, (e.g., chordomas or chondrosarcomas); *or*
- V.Malignancies in children (21 years of age and younger); *or*
- VI.Esophageal cancer; *or*
- VII.Malignancies requiring craniospinal irradiation (CSI) in persons with no active malignancy outside the craniospinal axis; *or*
- VIII.Mediastinal lymphomas; *or*
- IX.Thymomas and thymic carcinoma, *or*
- X.Thoracic sarcoma

- XI. Ocular tumors, including intraocular/uveal melanoma (includes the iris, ciliary body and choroid); *or*
- XII. Re-irradiation of an in-field or marginal recurrence being treated with curative intent, where other radiotherapy approaches would exceed acceptable constraints; *or*
- XIII. Primary or metastatic tumors of the spine where the spinal cord tolerance would be exceeded with photon radiotherapy approaches; *or*
- XIV. Primary or malignant bone tumors; *or*
- XV. Non-metastatic retroperitoneal sarcomas; *or*
- XVI. Localized unresectable hepatocellular carcinoma (HCC) or intrahepatic cholangiocarcinoma in the curative setting when documentation is provided that sparing of the surrounding normal tissue cannot be achieved with standard radiation therapy techniques, including intensity-modulated radiation therapy (IMRT), stereotactic body radiation therapy (SBRT), selective internal radiation spheres, and transarterial therapy (for example, chemoembolization).
- XVII. Non-metastatic pelvic tumors that are advanced and unresectable, with significant pelvic and para-aortic non-metastatic bulky nodes, where other radiotherapy approaches would exceed acceptable constraints; *or*
- XVIII. Persons with a single kidney or transplanted pelvic kidney with treatment of an adjacent target volume and in whom maximal avoidance of the organ is critical; *or*
- XIX. Persons with genetic syndromes making total volume of radiation minimization crucial, such as but not limited to NF-1, BRCA 1/2, deleterious ATM mutations, Li-Fraumeni, Lynch Syndrome, and retinoblastoma patients; *or*
- XX. Pituitary neoplasm

CVS Health considers a maximum of 40 fractions as medically necessary for all of the above indications for patients greater than 21 years of age. For patients 21 years of age or younger, CVS Health considers a maximum of 35 fractions as medically necessary. CVS Health considers proton beam radiotherapy experimental and investigational for all other indications because its effectiveness for these indications has not been established. The above is subject to medical necessity will be determined based on the terms of the member's benefit plan. Please check benefit plan descriptions.

Related CMS Coverage Guidance

This Clinical Policy supplements but does not replace, modify, or supersede existing Medicare Regulations or applicable National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs). The supplemental medical necessity criteria in this policy

further define those indications for services that are proven safe and effective where those indications are not fully established in applicable NCDs and LCDs. These supplemental medical necessity criteria are based upon evidence-based guidelines and clinical studies in the peer-reviewed published medical literature. While there is a possible risk of reduced or delayed care with any coverage criteria, CVS Health believes that the benefits of these criteria – ensuring patients receive services that are appropriate, safe, and effective – substantially outweigh any clinical harms.

Code of Federal Regulations (CFR):

42 CFR 417; 42 CFR 422; 42 CFR 423.

Internet-Only Manual (IOM) Citations:

CMS IOM Publication 100-02, Medicare Benefit Policy Manual; CMS IOM Publication 100-03 Medicare National Coverage Determination Manual.

Medicare Coverage Determinations:

Centers for Medicare & Medicaid Services (CMS), Medicare Coverage Database [Internet]. Baltimore, MD: CMS; updated periodically. Available at: Medicare Coverage Center. Accessed November 7, 2023.

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