

Proton Beam Radiotherapy (PBRT)

UR Guidelines 029

Policy and Procedure

Department	Medical Management
Purpose	To establish medical necessity guidelines for proton beam radiotherapy (PBRT)
Applicability	All LOB
Approved	
Approved	Anne-Laura Cook, MD
Approver Title	Vice President, Clinical Services
Original Effective Date	1/1/22
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Regulatory Requirement	

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Policy:

This document applies to VIVA HEALTH, Inc., VIVA HEALTH Administration L.L.C. and Triton Health Systems, L.L.C. hereafter referred to as VIVA HEALTH.

VIVA HEALTH requires the following criteria to be met for coverage of PBRT:

- The Dose Volume Histogram (DVH) confirms that one or more critical structures or organs are protected by the use of PBRT; or
- The dose to control or treat the tumor cannot be delivered without exceeding the tolerance of the normal tissue; or
- There is documented clinical rationale that doses generally thought to be above the level otherwise attainable with other radiation methods might improve control rates; or
- There is documented clinical rationale that higher levels of precision associated with PBRT compared to other radiation treatments are clinically necessary.
- For the treatment of primary lesions, the intent must be curative.
- For metastatic lesions, there must be:
 - the expectation of a long-term benefit (greater than 2 years of life expectancy) that could not have been attained with conventional therapy; or
 - the expectation of a complete eradication or improved duration of control of the metastatic lesion that could not have been safely accomplished with conventional therapy, as evidenced by a dosimetric advantage for PBRT over other forms of radiation therapy.
- For diagnosis requirements, please see Diagnoses sections.

VIVA HEALTH considers the following diagnoses medically appropriate for both Commercial and Medicare lines of business:

Group 1 Diagnoses

- Unresectable benign or malignant central nervous system tumors to include, but not limited to primary and variant forms of astrocytoma, glioblastoma, medulloblastoma, acoustic neuroma, craniopharyngioma, benign and atypical meningiomas, pineal gland tumors, and arteriovenous malformations.
- Intraocular melanomas
- Tumors that approach or are located at the base of the skull, including but not limited to:
 - Chordomas
 - Chondrosarcomas
 - Pituitary neoplasms

- Advanced stage and unresectable malignant lesions of the head and neck
- Malignant lesions of the paranasal sinus and other accessory sinuses
- Unresectable retroperitoneal sarcoma
- Primary or metastatic tumors of the spine where the spinal cord tolerance may be exceeded with conventional treatment or where the spinal cord has previously been irradiated
- Solid tumors in children

VIVA HEALTH considers the following diagnoses medically appropriate for the Medicare line of business only. These diagnoses will only be covered when the member is enrolled in a clinical trial, registry, or both. Documentation of the clinical trial and/or registry is required for coverage.:

Group 2 Diagnoses

- Unresectable lung cancers and upper abdominal/peri-diaphragmatic cancers
- Advanced stage, unresectable pelvic tumors including those with peri-aortic nodes or malignant lesions of the cervix
- Left breast tumors
- Unresectable pancreatic and adrenal tumors
- Skin cancer with macroscopic perineural/cranial nerve invasion of the skull base
- Unresectable malignant lesions of the liver, biliary tract, anal canal, and rectum
- Non-metastatic prostate cancer

All requests for coverage of PBRT must be sent for medical review regardless of medical necessity as laid out in this policy.

CPT Codes

- 77263: Therapeutic Radiology Treatment Planning, Complex
 - This code is typically reported only once per course of PBRT
- 77290: Therapeutic Radiology Simulation-Aided Field Setting, Complex
 - This code is typically reported only once per course of PBRT
- +77293: Respiratory Motion Management Simulation
 - List separately in addition to code for primary procedure
 - This is an add-on code and cannot be billed on its own. It should be billed with either CPT code 77295 or 77301.
 - The add-on code +77293 would be used in situations where respiratory motion may cause significant changes- in target definition and localization for proton treatment delivery, most commonly in patients with lung or upper gastrointestinal malignancies.
- 77321: Special Teletherapy Port Plan, Particles, Hemibody, Total Body
- 77295: Therapeutic Radiology Simulation-Aided Field Setting, 3-dimensional

- 77301: Intensity Modulation Radiotherapy Plan, Including DVH
 - This code is typically reported only once per course of PBRT
- 77307: Teletherapy Isodose Plan, Complex
- 77300: Basic Radiation Dosimetry Calculation
 - This code can generally be billed once for each beam or arc up to a limit of ten
- 77332: Treatment Devices, Design, and Construction, Simple
- 77333: Treatment Devices, Design, and Construction, Intermediate
- 77334: Treatment Devices, Design, and Construction, Complex
- 77331: Special Dosimetry
 - Only to be used when prescribed by the treating physician
- 77336: Continuing Medical Physical Consultation, Reported per week of therapy
 - Reported per 5 fractions of therapy
- 77370: Special Medical Radiation Physics Consultation
- 77520: Proton Treatment Delivery, Simple, Without Compensation
- 77522: Proton Treatment Delivery, Simple, With Compensation
- 77523: Proton Treatment Delivery, Intermediate
- 77525: Proton Treatment Delivery, Complex

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The above policy is based on the following references:

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