

Molina Clinical Policy Neutron and Proton Beam Radiation Therapy

Policy Number: 417

Last Approval: 2/14/2024

Next Review Due By: February 2025



Ohio Medicaid: All requests are reviewed on a case by case basis for medical necessity including but not limited to neck cancers.

POLICY SECTIONS

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DISCLAIMER

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment, and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

POLICY DESCRIPTION

The purpose of this policy is to provide general information applicable to the review and appropriateness of Radiation Therapy services. Although a service, supply or procedure may be medically necessary, it may be subject to limitations and/or exclusions under a member's benefit plan. If a service, supply, or procedure is not covered and the member proceeds to obtain the service, supply or procedure, the member may be responsible for the cost. Decisions regarding treatment and treatment plans are the responsibility of the physician. This policy is not intended to direct the course of clinical care a physician provides to a member, and it does not replace a physician's independent professional clinical judgment or duty to exercise special knowledge and skill in the treatment of members. Molina is not responsible for, does not provide, and does not hold itself out as a provider of medical care. The physician remains responsible for the quality and type of health care services provided to a member.

RELATED POLICIES

Policy No.	Policy Title
N/A	

BACKGROUND

Neutron Beam Radiation Therapy (NBRT) differs from other forms of radiation particle treatment such as protons or electrons as they have no electrical charge. The treatment effects are the results of the neutron mass producing dense radiation energy distributions. This effect is high energy linear transfer (LET) and may offset the negative effects of low oxygen tension in tumors leading to increased rate of control in hypoxic tumors. Proton Beam Radiation Therapy (PBRT) is a type of external radiation treatment. Using a stereotactic planning and delivery system, positively charged subatomic particles (protons) are targeted to a specific cancer. Protons behave differently than x-rays or photons in that they have a low energy deposition rate as they enter the body, followed by a steep increased energy deposition when they reach their target (the Bragg peak).

Radiation Therapy Treatment Process:

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- A. Consultation
- B. Simulation
- C. Treatment Planning
- D. Treatment Delivery

INDICATIONS and/or LIMITATIONS OF COVERAGE

NEUTRON BEAM RADIATION THERAPY (NBRT)

Indications for Use/Inclusion Criteria¹⁻¹⁰

All requests for NBRT require Clinical Review.

A. Neutron Beam Radiation Therapy is medically necessary only in the treatment of:

- 1. Salivary gland cancers – when recurrent **OR** in the case of a second primary cancer **OR** following resection with gross residual disease or positive margins **OR** for re-treatment of a previously irradiated area.

Exclusion Criteria

- A. All other cancers are not considered medically necessary for Neutron Beam Radiation Therapy.

PROTON BEAM RADIATION THERAPY (PBRT)

Indications for Use/Inclusion Criteria¹¹⁻⁸⁵

A. Proton Beam Radiation Therapy is medically necessary only in the treatment of:

- 1. Chordomas and Chondrosarcomas of the base of the skull or spine when disease is localized (non-metastatic).
- 2. Primary or metastatic CNS malignancies
- 3. Hepatocellular cancer or intrahepatic cholangiocarcinoma – when unresectable and non-metastatic
- 4. Melanoma of the uveal tract – with no evidence of metastasis or extra scleral extension.
- 5. Pediatric cancers – in all cases of pediatric cancers (in patients 18 yrs. old or younger) except in cases of bone metastases (see exclusion criteria below).
- 6. Cancer of the nasal cavity and paranasal sinuses – when tumor involves the base of skull and proton therapy is needed to spare the orbit, optic nerve, optic chiasm, or brainstem
- 7. Re-irradiation – for re-treatment of a previously irradiated area

Exclusion Criteria

- A. All other cancers are not considered medically necessary for Proton Beam Radiation Therapy.
- B. Pediatric cancers in cases where the treatment is for previously untreated bone metastases.

EXCLUSION CRITERIA

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Neutron Beam Radiation Therapy

- A. All other cancers (not listed above in the 'Indications' section) are not considered medically necessary for Neutron Beam Radiation Therapy.

Proton Beam Radiation Therapy

- A. All other cancers (not listed above in the 'Indications' section) are not considered medically necessary for Proton Beam Radiation Therapy
- B. Pediatric cancers in cases where the treatment is for previously untreated bone metastases.

ATTACHMENTS

None

APPLICABLE CPT / HCPCS PROCEDURE CODES

CPT (Current Procedural Terminology) Codes

Code	Description
77423	High energy neutron radiation treatment delivery, 1 or more isocenter(s) with coplanar or non-coplanar geometry with blocking and/or wedge, and/or compensator(s)
77520	Proton treatment delivery; simple, without compensation
77522	Proton treatment delivery; simple, with compensation
77523	Proton treatment delivery; intermediate
77525	Proton treatment delivery; complex

HCPCS (Healthcare Common Procedure Coding System) Code

Code	Description
S8030	Scleral application of tantalum ring(s) for localization of lesions for proton beam therapy

CODING DISCLAIMER. Codes listed in this policy are for reference purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry standard coding practices for all submissions. When improper billing and coding is not followed, Molina has the right to reject/deny the claim and recover claim payment(s). Due to changing industry practices, Molina reserves the right to revise this policy as needed.

APPROVAL HISTORY

- 02/14/2024 Updated references.
- 08/09/2023 Updated references.
- 06/14/2023 Removed indication that all proton beam require clinical review by physician and also need for IMRT vs PBRT comparison study requirement. Added code 77423.
- 08/10/2022 Adopted NCH policy and retired MCP.

REFERENCES

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APPENDIX

Reserved for State specific information. Information includes, but is not limited to, State contract language, Medicaid criteria and other mandated criteria

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