

POLICY NUMBER UM XRT_2007	SUBJECT Proton Beam Therapy (PBT)	DEPT/PROGRAM UM Dept	PAGE 1 OF 8
DATES COMMITTEE REVIEWED 03/14/18, 06/12/19, 12/11/19	APPROVAL DATE December 11, 2019	EFFECTIVE DATE December 11, 2019	COMMITTEE APPROVAL DATES (latest version listed last) 03/14/18, 06/12/19, 12/11/19
PRIMARY BUSINESS OWNER: UM APPROVED BY: Dr. Andrew Hertler		COMMITTEE/BOARD APPROVAL Utilization Management Committee	
URAC STANDARDS HUM 1		NCQA STANDARDS UM 2	ADDITIONAL AREAS OF IMPACT
CMS REQUIREMENTS Per applicable LCD/NCD	STATE/FEDERAL REQUIREMENTS	APPLICABLE LINES OF BUSINESS All	

I. PURPOSE

The purpose of this policy is to provide general information applicable to the review and appropriateness of Proton Beam Therapy (PBT) 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. NCH 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

II. BACKGROUND

Proton Beam Therapy (PBT) offer an alternative means for focal treatment. This radiation approach combines multiple finely collimated radiation beams and stereotaxy (3D target localization). In delivering multiple radiation beams that intersect to deliver an accurate, high dose of radiation to a carefully defined location.

III. DEFINITIONS

American Society for Radiation Oncology (ASTRO) defines Proton Beam Therapy (PBT) as an advanced type of external-beam radiation therapy that uses proton rather than photon beams to deliver radiation doses to a tumor. Proton therapy offers a high degree of precision, which allows radiation oncologists to target an escalated dose of radiation directly on a tumor and spare nearby healthy tissue.

IV. POLICY

1. **Medicare** – for Medicare and Medicare Advantage enrollees, the coverage policies of CMS (Centers for Medicare and Medicaid Services) may take precedence over Company's guidelines.
2. Proton Beam Therapy (PBT) request meet the definition of medical necessity for the following indications:
 - a. Tumors that approach or are located at the base of skull, including but not limited to chordoma and chondrosarcoma
 - b. Non-metastatic retroperitoneal sarcomas
 - c. Ocular tumors, including intraocular melanomas
 - d. Cancers of the paranasal sinuses and other accessory sinuses such as Ethmoid Sinus, Sphenoid Sinus, Frontal Sinuses Base of Skull, Atresia, Neuroblastoma and



- e. Re-irradiation cases where cumulative critical structure dose would exceed tolerance dose
- f. Malignant and benign primary central nervous system (CNS) tumors
- g. Advanced (i.e. T4) and/or un-resectable head and neck cancers
- h. Hepatocellular cancer
- i. 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
- j. Treatment of patients with Genetic syndromes making total volume of radiation minimization crucial, such as but not limited to NF-1 patients and retinoblastoma patients

All other indications not listed above *maybe* considered experimental or investigational as there may be insufficient evidence to support conclusions regarding the effect of on health outcomes. Indications not listed will be evaluated on a case by case basis at the Clinical Reviewer level.

V. PROCEDURE

The following documentation is necessary for reviewing a Proton Beam Therapy (PBT) request:

- 1. Physician history and physical including radiographic reports IE: MRI, CT and prior PET/CT scans
- 2. Attending Radiation Oncologist Consult or Progress note
- 3. Treatment; in certain circumstances a comparison Dose Volume Histogram (DVH) comparing IMRT

VI. APPROVAL AUTHORITY

- 1. Review – Utilization Management
- 2. Final Approval – Utilization Management Committee

VII. ATTACHMENTS

None

VIII. REFERENCES

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