

Neutron Beam Therapy (NBT)

Table of Content

[Purpose](#)
[Description & Definitions](#)
[Criteria](#)
[Coding](#)
[Document History](#)
[References](#)
[Special Notes](#)
[Keywords](#)

[Effective Date](#) 10/2007
[Next Review Date](#) 2/15/2024
[Coverage Policy](#) Medical 202
[Version](#) 5

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

Purpose:

This policy addresses the medical necessity of Neutron beam therapy (NBT).

Description & Definitions:

Neutron beam therapy (NBT) is a type of external radiation treatment in which high energy neutrons target a direct location.

Criteria:

Neutron beam therapy is considered medically necessary for **All of the following**:

- Individual has a salivary gland tumor
- Individual's tumor is **1or more of the following**:
 - Inoperable
 - Unresectable
 - Locally advanced and individual has gross residual disease

Neutron beam therapy is considered **not medically necessary** for uses other than those listed in the clinical criteria.

Coding:

Medically necessary with criteria:

Coding	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)

Considered Not Medically Necessary:

Coding	Description
--------	-------------

	None
--	------

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

Document History:

Revised Dates:

- 2016: March, April
- 2015: March
- 2014: April, October, November
- 2013: March, October
- 2012: March, November
- 2011: January, March, May, July
- 2010: August
- 2009: July
- 2008: July

Reviewed Dates:

- 2023: February
- 2022: February
- 2021: March
- 2020: March
- 2018: October
- 2017: December
- 2014: March
- 2010: July, December

Effective Date:

- October 2007

References:

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

(2022). Retrieved Dec 13, 2022, from Hayes, Inc:

<https://evidence.hayesinc.com/search?q=%257B%2522text%2522:%2522neutron%2520beam%2522,%2522title%2522:n ull,%2522termsource%2522:%2522searchbar%2522,%2522page%2522:%257B%2522page%2522:0,%2522size%2522: 50%257D,%2522type%2522:%2522all%2522,%2522sources%2522:>

(2022). Retrieved Dec 13, 2022, from Centers for Medicare and Medicaid Services: [https://www.cms.gov/medicare-coverage-database/search-](https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=Neutron&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance)

[results.aspx?keyword=Neutron&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F ,P&contractOption=all&sortBy=relevance](https://www.cms.gov/medicare-coverage-database/search-results.aspx?keyword=Neutron&keywordType=starts&areald=s53&docType=NCA,CAL,NCD,MEDCAC,TA,MCD,6,3,5,1,F,P&contractOption=all&sortBy=relevance)

(2022, Aug 31). Retrieved Dec 13, 2022, from MCG: <https://careweb.careguidelines.com/ed26/index.html>

(2022). Retrieved Dec 13, 2022, from PubMed:

<https://pubmed.ncbi.nlm.nih.gov/?term=neutron%20beam%20therapy&filter=simsearch1.fha&filter=simsearch2.ffrft&filter= years.2022-2022>

(2022). Retrieved Dec 13, 2022, from UpToDate:

[https://www.uptodate.com/contents/search?search=Neutron%20beam%20therapy&sp=0&searchType=PLAIN_TEXT&so urce=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autoComplete=false&language=&max=0&index =&autoCompleteTerm=&rawSentence=](https://www.uptodate.com/contents/search?search=Neutron%20beam%20therapy&sp=0&searchType=PLAIN_TEXT&source=USER_INPUT&searchControl=TOP_PULLDOWN&searchOffset=1&autoComplete=false&language=&max=0&index =&autoCompleteTerm=&rawSentence=)

Head and Neck Cancers with Evidence Blocks. (2022, Aug 26). Retrieved Dec 13, 2022, from National Comprehensive Cancer Network: https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck_blocks.pdf

Management of Salivary Gland Malignancy: ASCO Guideline. (2021, Jun 10). Retrieved Dec 13, 2022, from American Society of Clinical Oncology: <https://ascopubs.org/doi/full/10.1200/JCO.21.00449>

RADIATION ONCOLOGY - Appropriate Use Criteria: Brachytherapy, Intensity Modulated Radiation Therapy, Stereotactic Body Radiation Therapy, and Stereotactic Radiosurgery. (2022, Nov 06). Retrieved Dec 13, 2022, from AIM Specialty Health: <https://aimspecialtyhealth.com/wp-content/uploads/2022/08/Radiation-Therapy-excludes-Proton-11-06-22.pdf>

System, Radiation Therapy, Charged-Particle, Medical. (2022, Dec 12). Retrieved Dec 13, 2022, from Food and Drug Administration: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPCD/classification.cfm?id=5630>

(2021). Retrieved Feb 07, 2022, from DynaMed: <https://www.dynamedex.com/results?q=neuron+therapy&lang=en>
Galloway, T., & Amdur, R. (2021, Aug 11). Management of late complications of head and neck cancer and its treatment. Retrieved Feb 06, 2022, from UpToDate: https://www.uptodate.com/contents/management-of-late-complications-of-head-and-neck-cancer-and-its-treatment?search=neutron%20therapy%20&source=search_result&selectedTitle=3~11&usage_type=default&display_rank=3

(2022). Retrieved Feb 06, 2022, from Department of Medical Assistance Services: <https://www.virginiamedicaid.dmas.virginia.gov/wps/portal/ProviderManual>

Special Notes: *

This medical policy expresses Sentara Health Plan's determination of medical necessity of services, and they are based upon a review of currently available clinical information. Medical policies are not a substitute for clinical judgment or for any prior authorization requirements of the health plan. These policies are not an explanation of benefits.

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.

Keywords:

neutron beam radiation, shp medical 202, salivary gland tumor