Harvard Pilgrim Health Care | TUFTS Health Plan

Medical Necessity Guidelines:

Intensity-Modulated Radiation Therapy (IMRT)

Redlined version for compliance with Maine legislation
Please refer to the Medical Necessity Guidelines page for more complete policy information.

Effective: January 1, 2025

Prior Authorization Required If REQUIRED, submit supporting clinical documentation pertinent to service request to the FAX numbers below.	Yes ☒ No ☐
Notification Required If REQUIRED, concurrent review may apply.	Yes ☐ No ☒

Applies to:

Commercial Products

☒ Harvard Pilgrim Health Care Commercial products; 800-232-0816
☒ Tufts Health Plan Commercial products; 617-972-9409
CareLink℠ – Refer to CareLink Procedures, Services and Items Requiring Prior Authorization

Public Plans Products

☒ Tufts Health Direct – A Massachusetts Qualified Health Plan (QHP) (a commercial product); 888-415-9055
☒ Tufts Health Together – MassHealth MCO Plan and Accountable Care Partnership Plans; 888-415-9055
☒ Tufts Health RITogether – A Rhode Island Medicaid Plan; 857-304-6404
☐ Tufts Health One Care-- A dual-eligible product; 857-304-6304

Senior Products

☐ Harvard Pilgrim Health Care Stride Medicare Advantage; 866-874-0857
☒ Tufts Health Plan Senior Care Options (SCO), (a dual-eligible product); 617-673-0965
☒ Tufts Medicare Preferred HMO, (a Medicare Advantage product); 617-673-0965
☒ Tufts Medicare Preferred PPO, (a Medicare Advantage product); 617-673-0965

Note: While you may not be the provider responsible for obtaining prior authorization or notifying Point32Health, as a condition of payment you will need to ensure that any necessary prior authorization has been obtained and/or Point32Health has received proper notification. If notification is required, providers may additionally be required to provide updated clinical information to qualify for continued service

Overview

Intensity-modulated radiation therapy (IMRT) is an advanced form of three-dimensional conformal radiation therapy (3D-CRT). IMRT changes the intensity of radiation in different parts of a single radiation, allowing multiple treated areas to receive different doses. Conformal radiation therapy uses a three-dimensional image, typically CT, MRI or PET, to create a planning target volume and calculate dose distribution to the targeted area. The goal of IMRT is to deliver high radiation dose and conform the radiation dose to the target while avoiding and/or reducing radiation exposure to healthy tissue, limiting the side effects of treatment. IMRT is a treatment option when tumor targets are positioned near sensitive normal tissues and/or critical structures.

NOTE: This medical necessity guidelines applies to Members 18 years of age and older. For Members under the age of age IMRT is covered without additional review.

The Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) and MassHealth for coverage determinations for its Dual Product Eligible plan members and CMS for its Medicare Advantage plan members. CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs) and documentation included in the Medicare manuals and MassHealth Medical Necessity Determinations are the basis for coverage determinations. When CMS and MassHealth do not provide guidance, the Plan's internally developed medical necessity guidelines are used. CMS coverage guidelines are not established for this service.

For the service of IMRT, evidence is sufficient for coverage. In the past several decades, several advanced radiotherapy techniques, including intensity-modulated radiotherapy (IMRT), have been established to increase the conformal degree of

target areas as well as the radiation dose, and to lessen the toxicity to normal organs. Studies have shown that IMRT technique demonstrated a clear advantage in dose coverage, conformity, and homogeneity over three-dimensional conformal radiation therapy.

The use of this criteria will ensure access to clinically appropriate care. See References section below for all evidence accessed in the development of these criteria.

Clinical Guideline Coverage Criteria

1. The Plan considers intensity-modulated radiation therapy as medically necessary for definitive treatment of the following neoplasms. Submitted documentation must demonstrate that dosimetric planning using 3-D conformal radiation would result in an unacceptable normal tissue toxicity in an adjacent organ or organs, and therefore use of IMRT is of superior clinical benefit than 3-D conformal radiation therapy.:
    a. Head and Neck Cancers
        i. Oropharyngeal
        ii. Nasopharyngeal
        iii. Sinonasal
        iv. thyroid, salivary glands
    b. Central Nervous System (CNS) tumors (primary, metastatic, or benign) including the brain, brainstem, spinal cord, and ocular tumors
    c. Breast Cancer
    d. Gastrointestinal Cancers
        i. Esophageal
        ii. Gastric
        iii. Small-bowel carcinomas
        iv. Colorectal/Anal
        v. Gallbladder including bile duct
        vi. Hepatocellular carcinoma (HCC)
        vii. Pancreatic
    e. Thoracic Cancer
        i. Lung Cancer
        ii. Mediastinal including thymoma, lymphoma, and thymic cancer
        iii. Malignant mesothelioma
    f. Sarcomas
    g. Primary benign or malignant bone tumors
    h. Skin Cancers
    i. Genitourinary Cancers including adrenal, renal, bladder, prostate, ureteral, and penile
    j. Gynecological malignancies including uterine, cervical, and vulvar
2. Re-irradiation using IMRT is considered medically necessary to limit dose and minimize toxicity of previously irradiated tissue and/or critical structures.
3. IMRT is appropriate for pediatric patients (age less than 21) to treat all pediatric tumors in which radiation therapy is required.

Limitations

While IMRT may be used during a course of treatment with PBT, the simultaneous use of IMRT and PBT is considered investigational and not covered.

Codes

The following code(s) require prior authorization:

Table 1: CPT/HCPCS Codes

Code	Description
77301	Intensity modulated radiotherapy plan, including dose-volume histograms for target and critical structure partial tolerance specifications

Code	Description
77338	Multi-leaf collimator (MLC) device(s) for intensity modulated radiation therapy (IMRT), design and construction per IMRT plan
77385	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple
77386	Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex
77387	Guidance for localization of target volume for delivery of radiation treatment, includes intrafraction tracking, when performed
G6015	Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic MLC, per treatment session
G6016	Compensator-based beam modulation treatment delivery of inverse planned treatment using three or more high resolution (milled or cast) compensator, convergent beam modulated fields, per treatment session
G6017	Intra-fraction localization and tracking of target or patient motion during delivery of radiation therapy (e.g., 3D positional tracking, gating, 3D surface tracking), each fraction of treatment

References:

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2. American College of Radiology (ACR) . Radiation Oncology Resources. Intensity-modulated radiation therapy (IMRT). Updated July 2021(b). https://www.radiologyinfo.org/en/info.cfm?pg=imrt. Accessed December 29, 2021.
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4. Halasz LM, Attia A, Bradfield L, et al. Radiation Therapy for IDH-Mutant Grade 2 and Grade 3 Diffuse Glioma: An ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2022;12(5):370-386. doi:10.1016/j.prro.2022.05.004
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6. Smith BD, Bellon JR, Blitzblau R, et al. Radiation therapy for the whole breast: Executive summary of an American Society for Radiation Oncology (ASTRO) evidence-based guideline. *Pract Radiat Oncol*. 2018;8(3):145-152. doi:10.1016/j.prro.2018.01.012
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13. Simone CB 2nd, Bogart JA, Cabrera AR, et al. Radiation Therapy for Small Cell Lung Cancer: An ASTRO Clinical Practice Guideline. *Pract Radiat Oncol*. 2020;10(3):158-173. doi:10.1016/j.prro.2020.02.009
14. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Anal carcinoma. V1.2023. anal.pdf (nccn.org)
15. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Biliary tract cancers. V1.2023. btc.pdf (nccn.org)
16. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Bone cancer. V2.2023. bone.pdf (nccn.org)
17. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Breast cancer. V3.2023. breast.pdf (nccn.org)
18. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Central nervous

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19. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Cervical cancer. V1.2023. cervical.pdf (nccn.org)
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21. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Head and neck cancers. V1.2023. head-and-neck.pdf (nccn.org)
22. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Hepatocellular carcinoma. V1.2023. hcc.pdf (nccn.org)
23. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Hodgkin lymphoma. V2.2023. hodgkins.pdf (nccn.org)
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25. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Pancreatic adenocarcinoma. V2.2022. pancreatic.pdf (nccn.org)
26. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Pediatric central nervous system cancers. V2.2023. ped_cns.pdf (nccn.org)
27. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Pediatric Hodgkin lymphoma. V2.2023. ped_hodgkin.pdf (nccn.org)
28. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Prostate cancer. V1.2023. prostate.pdf (nccn.org)
29. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Small bowel adenocarcinoma. V1.2023. small_bowel.pdf (nccn.org)
30. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Thymomas and thymic carcinomas. V1.2023. thymic.pdf (nccn.org)
31. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Thyroid carcinoma. V3.2022. thyroid.pdf (nccn.org)
32. National Comprehensive Cancer Network (NCCN). Clinical Practice Guidelines in Oncology. Vulvar cancer. V1.2023. vulvar.pdf (nccn.org)

Approval And Revision History

March 15, 2023: Reviewed by the Medical Policy Approval Committee (MPAC). New coverage guideline created for Intensity Modulated Radiation Therapy, covered without prior authorization for effective date April 1, 2023
Subsequent endorsement date(s) and changes made:

- June 21, 2023: Reviewed by MPAC. Minor language clarifications.
- November 2023: Rebranded Unify to One Care effective January 1, 2024
- August 30, 2024: Reviewed by MPAC. Criteria reorganized by system group. New indications added, effective October 1, 2024
- October 17, 2024: Reviewed by MPAC. Prior authorization will now be required for 77301, 77338, 77385, 77386, 77387, G6015, G6016, G6017. CMS language added under Overview. Criteria edited to require documentation demonstrating 3D conformal radiation would result in an unacceptable normal tissue toxicity. Pediatric patient criteria added. Effective date January 1, 2025.

Background, Product and Disclaimer Information

Medical Necessity Guidelines are developed to determine coverage for benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. We make coverage decisions using these guidelines, along with the Member's benefit document, and in coordination with the Member's physician(s) on a case-by-case basis considering the individual Member's health care needs.

Medical Necessity Guidelines are developed for selected therapeutic or diagnostic services found to be safe and proven effective in a limited, defined population of patients or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in our service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. We revise and update Medical Necessity Guidelines annually, or more frequently if new evidence becomes available that suggests needed revisions.

For self-insured plans, coverage may vary depending on the terms of the benefit document. If a discrepancy exists between a Medical Necessity Guideline and a self-insured Member's benefit document, the provisions of the benefit document will

govern. For Tufts Health Together (Medicaid), coverage may be available beyond these guidelines for pediatric members under age 21 under the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefits of the plan in accordance with 130 CMR 450.140 and 130 CMR 447.000, and with prior authorization.

Treating providers are solely responsible for the medical advice and treatment of Members. The use of this guideline is not a guarantee of payment or a final prediction of how specific claim(s) will be adjudicated. Claims payment is subject to eligibility and benefits on the date of service, coordination of benefits, referral/authorization, utilization management guidelines when applicable, and adherence to plan policies, plan procedures, and claims editing logic.