

MEDICAL POLICY

MEDICAL POLICY DETAILS	
Medical Policy Title	Intensity Modulated Radiation Therapy (IMRT)
Policy Number	6.01.24
Category	Technology Assessment
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Committee Approval Date	03/20/03, 03/18/04, 02/17/05, 12/15/05, 12/21/06, 12/20/07, 10/23/08, 01/21/10, 08/19/10, 11/17/11, 12/20/12, 01/16/14, 08/21/14, 11/19/15, 12/15/16, 08/17/17, 08/16/18, 05/16/19, 5/21/20, 8/20/20, 06/17/21
Revised Effective Date	10/15/21
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Product Disclaimer	<ul style="list-style-type: none"> • If a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan product) or a Medicaid product covers a specific service, medical policy criteria apply to the benefit. • If a Medicare product covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.

POLICY STATEMENT

IMRT will be approved when comparative three-dimensional (3D) and IMRT plans demonstrate that a 3D plan does not meet the “Acceptable” normal tissue constraints, using standard metrics published by the Radiation Therapy Oncology Group (RTOG)/National Comprehensive Cancer Network (NCCN).

POLICY GUIDELINES

- I. Daily IGRT is recommended when IMRT is considered **medically appropriate** for individuals with the following cancers when the following criteria have been met:

A. Adrenal tumors; for any of the following: <ol style="list-style-type: none"> 1. Stage II or III disease 2. Presence of positive margins 3. Presence of high-grade or Ki-67 > 10%
B. Anal cancer for definitive treatment.
C. Brain metastases: <ol style="list-style-type: none"> 1. sole treatment of partial brain therapy in individuals with good prognosis; or 2. as boost therapy; or 3. to spare the hippocampi when delivering whole brain radiation therapy (HA-WBRT) in patients who: <ol style="list-style-type: none"> a. have a prognosis of at least 4 months; and b. have a Karnofsky Performance Status (KPS) of at least 70 or an Eastern Cooperative Oncology Group (ECOG) Performance Status of at least 2; and c. do not have leptomeningeal disease; and

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d. whose primary histology is not germ cell, small cell, lymphoma or unknown
D. Primary bone cancer; as clinically indicated.
E. Bone metastases where overlap with previous radiotherapy fields is likely to cause complications.
F. Bladder cancer when dose to nearby critical structures may be exceeded.
G. Breast cancer when: <ol style="list-style-type: none">1. there has been previous external beam radiation to the chest; or2. when dose to nearby critical structures may be exceeded; or3. accelerated partial breast irradiation following breast-conserving surgery delivered in 10 fractions twice daily or 5 fractions delivered once daily.
H. Cervical cancer: <ol style="list-style-type: none">1. Stage IA2, IB1, IB2, IIA, IIB, IIIA, IIIB, or IVA<ol style="list-style-type: none">a. Positive pelvic nodes on positron emission tomography (PET), magnetic resonance imaging (MRI) or computed tomography (CT) scan being treated to doses of 54 Gy or higher; orb. definitive treatment when additional brachytherapy cannot be performed and the patient is inoperable; orc. treatment of the paraortic nodes2. as adjuvant (post-operative) treatment in an individual without evidence of distant metastases for positive surgical margins, positive pelvic nodes, positive paraaortic nodes, close vaginal margins less than 0.5 cm, extensive lymphovascular or capillary involvement, deep stromal invasion, large tumor size greater than four cm; or3. Locoregional recurrence in an individual without evidence of distant metastases when either of the following:<ol style="list-style-type: none">a. The paraaortic nodes will be treated; orb. The postoperative setting where the whole pelvis will be treated to 45 Gy or higher. or4. In the non-curative setting when symptoms are present and when previous external beam radiation therapy (EBRT) or brachytherapy has been given and normal tissue dose constraints cannot be met with 3D CRT.
I. Craniospinal tumors; <ol style="list-style-type: none">1. malignant brain tumors- Gliomas; or2. ependymoma, adult medulloblastoma and primitive neuroectodermal tumors (PNET); or3. primary CNS lymphoma;<ol style="list-style-type: none">a. in younger adult patients with good performance status and good response to chemotherapy; orb. in patients with poor response to chemotherapy; orc. without chemotherapy in patients with a poor performance status, or severely immunocompromised; ord. in patients with ocular disease; ore. in patients with recurrent disease; or4. benign brain tumors (e.g., pituitary adenomas, acoustic neuromas, schwannomas, craniopharyngiomas, hemangioblastomas, pineocytomas, glomus tumors, and meningiomas); or5. cavernous malformations.
J. Endometrial cancer; when: <ol style="list-style-type: none">1. dose to nearby critical structures may be exceeded; or2. in the post-hysterectomy setting;
K. Esophageal cancer in the curative setting when normal tissue dose constraints cannot be met with 3D CRT and as definitive treatment for tumors in the cervical esophagus.
L. Gastric cancer; when dose to small bowel, liver, heart, lung, kidneys and spinal cord may be exceeded.

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| <p>M. Head and neck cancer; when clinically meaningful reduction in doses to critical organs can only be achieved with IMRT and:</p> <ol style="list-style-type: none">1. as definitive therapy in select T1-2, N0 cases as monotherapy; or2. as definitive therapy in select T1N1, T2 N0-1 cases as monotherapy; or3. as definitive therapy with concurrent chemotherapy in T2-4a, N0-3 cases; or4. post-operatively when there are high risk factors (e.g., pT3 or pT4 primary tumors, N2 or N3 nodal disease, positive nodes in levels IV or V, perineural invasion, vascular tumor embolism, or positive surgical margins or residual gross disease; or5. as palliative therapy in a previously un-irradiated individual with symptomatic local disease; or6. as salvage therapy after prior radiation in cases of recurrent or persistent disease, or for in-field new primary tumors, in cases in which there are no known distant metastases. |
| <p>N. Hodgkin Lymphoma; when clinically meaningful reduction in doses to critical organs can only be achieved with IMRT and:</p> <ol style="list-style-type: none">1. when used as sole therapy in selected cases of stage I-IIA lymphocyte predominant Hodgkin's lymphoma; or2. as adjuvant radiation therapy (combined modality treatment) after chemotherapy in stage III-IV disease to areas of initial bulky involvement or to areas with less than a complete response; or3. as salvage radiation therapy after chemotherapy to areas of relapsed bulky involvement; or4. as salvage therapy in an individual who relapses after solo chemotherapy for initial stage I/IIA disease; or5. as palliative therapy in an individual with advanced or recurrent symptomatic local disease that is not curative |
| <p>O. Liver, primary (hepatocellular (HCC), cholangiocarcinoma):</p> <ol style="list-style-type: none">1. as definitive management of medically or technically unresectable localized HCC in an individual with adequate hepatic reserve; or2. as definitive management of unresectable localized intrahepatic or extrahepatic bile duct cancer; or3. as adjuvant (postoperative) treatment of resected intrahepatic or extrahepatic bile duct cancer |
| <p>P. Lung Cancer (Small Cell and Non-Small Cell) when:</p> <ol style="list-style-type: none">1. Stage III Non-Small Cell; or2. Stage III Small Cell; |
| <p>Q. Multiple Myeloma and Solitary Plasmacytomas for definitive treatment of a solitary plasmacytoma presenting in the head and neck region.</p> |

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R. Non Hodgkin Lymphoma

1. Supradiaphragmatic

- a. Definitive radiation therapy when used as sole therapy for selected cases in an individual with
 - i. Stage I-IIA low grade non-Hodgkin lymphoma NHL; or
 - ii. Extranodal NK/T-cell lymphoma, or nasal lymphoma; or
 - iii. Consolidative radiotherapy after initial chemotherapy in mantle cell lymphoma, diffuse large cell B-cell lymphoma, Burkitt's lymphoma, lymphoblastic lymphoma, primary cutaneous B-cell lymphoma, peripheral T-cell lymphoma;
- b. Adjuvant radiation therapy after chemotherapy in an individual with stage I-IIB disease to areas of initial involvement
- c. Areas of less than a complete response (CR) in an individual with stage III-IV disease, to areas of less than a CR
- d. Palliative therapy in an individual with symptomatic local disease, advanced or recurrent, symptomatic disease that is not curative.
- e. IMRT is considered not medically necessary for the treatment of an individual with low dose radiation.

2. Subdiaphragmatic:

- a. Definitive radiation therapy when used as sole therapy for selected cases in an individual with
 - i. stage I-IIA low grade non-Hodgkin lymphoma NHL; or
 - ii. consolidative radiotherapy after initial chemotherapy in mantle cell lymphoma, diffuse large cell B-cell lymphoma, Burkitt's lymphoma, lymphoblastic lymphoma, primary cutaneous B-cell lymphoma, peripheral T-cell lymphoma=.

3. Non Hodgkin Lymphoma in sub-diaphragmatic presentations, when plans demonstrate that a 3DCRT plan does not meet the "acceptable" normal tissue constraints using standard metrics

S. Pancreatic cancer when dose to small bowel, liver, heart, lung, kidneys and spinal cord may be exceeded.

T. Prostate cancer; clinically localized disease:

- 1. low, intermediate and high-risk ; or
- 2. as adjuvant or salvage therapy after radical prostatectomy in men with adverse pathological features (*refer to Policy Guideline II*) or detectable PSA with no evidence of disseminated disease; or
- 3. combined with brachytherapy for intermediate and high risk disease

U. Prostate cancer; metastatic disease:

- 1. Low volume disease, castration naïve metastatic prostate cancer with three or fewer bone metastases and no visceral disease, in conjunction with androgen deprivation therapy (ADT);
- 2. Localized prostate cancer for ANY of the following:
 - a. High-risk or node-positive prostate cancer when the pelvic nodes will be treated
 - b. Inflammatory bowel disease, Crohns and ulcerative colitis
 - c. Previous pelvic radiation therapy
 - d. History of rectal, urinary bladder, or urethral fistula or abscess
 - e. History of anorectal surgery, including but not limited to coloanal anastomosis
 - f. Prior local prostate treatment including cryotherapy or high-intensity focused ultrasound (HIFU)
 - g. Prior transurethral resection of prostate (TURP)

V. Rectal Cancer;

- 1. Extension of tumor to involve the anal canal requiring coverage of the inguinal nodes; or
- 2. A dose of greater than 54 Gy is planned for curative treatment in the non-metastatic, medically inoperable setting; or
- 3. Previous pelvic radiation

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W. Soft Tissue Sarcomas
1. Extremity, trunk, head and neck for: a. Preoperative treatment; or b. Postoperative treatment
2. Retroperitoneal, intra-abdominal sites (excluding desmoid tumors) for: a. Preoperative treatment; or c. Postoperative treatment
3. Treatment of primary or metastatic sites for salvage or palliation
X. Spinal Cord primary inoperable tumors with compression or intractable pain where tolerance may be exceeded by conventional treatment.
Y. Upper genitourinary tract tumors; 1. Adjuvant setting, in an individual with no high risk features; or 2. Adjuvant setting, in an individual with T3-T4 disease, positive margins or extra-nodal extension; or 3. Neoadjuvant treatment when combined with chemotherapy
Z. Urethral cancer; 1. Definitive setting in an individual with T2- T4 or node positive disease; or 2. Adjuvant setting, in an individual with no high risk features; or 3. Adjuvant setting, in an individual with T3-T4 disease, positive margins or extra-nodal extension
AA. Vulvar cancer; 1. Adjuvant therapy following initial surgery; or 2. Preoperative therapy for locally advanced disease; or 3. In the definitive setting; or 4. Recurrent vulvar cancer without evidence of distant spread of disease.

II. Based on our criteria and assessment of the peer-reviewed literature intensity modulated radiation therapy (IMRT) has not been medically proven to be more effective than 3D CRT and, therefore, is considered **not medically necessary** for all other indications including, but not limited to:

A. <i>Bone metastasis</i> , unless there has been previous irradiation to the site.
B. <i>Breast cancer</i> , post-mastectomy setting with positive axillary lymph node(s), a primary tumor greater than 5 cm or positive or close (< 1 mm) surgical margins.
C. <i>Pancreatic cancers</i> , when used for palliation.
D. <i>Prostate cancer</i> , when volume of disease is high
E. <i>Renal cell cancer</i> , as definitive or adjuvant treatment.

III. Based on our criteria and review of the peer-reviewed literature, the use of the SpaceOAR system (Augmenix, Inc) in men prior to IMRT treatment for prostate cancer is considered **not medically necessary**.

Refer to Corporate Medical Policy #6.01.16 Brachytherapy or Radioactive Seed Implantation for Prostate Cancer.

Refer to Corporate Medical Policy #6.01.30 Brachytherapy for Breast Cancer (Balloon or Electronic).

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POLICY GUIDELINES

- I. Radiation therapy may be delivered by many different techniques depending on the type of cancer being treated, tumor size, location, and dose to be delivered. Therefore the clinical rationale for use of IMRT must be clearly documented by the treating radiation oncologist. The documentation must reflect the condition of the individual patient, and indicate the medical necessity for which the service was performed. The documentation submitted for review must include:
 - A. A statement by the treating physician, documenting the special need for performing IMRT on the specific patient, rather than performing conventional or 3D treatment planning and delivery.
 - B. A clear, concrete explanation, not theoretical, as to why 3D CRT would not meet the patient's needs. Comparative 3D CRT and IMRT treatment plans with dose volume histograms (DVH) that support this position are required. The prescription must define the goals and requirements of the treatment plan, including the specific dose constraints for the target(s) and nearby critical structures.
- II. In prostate cancer, adverse pathological features include:
 - A. Positive surgical margins; and/or
 - B. Extracapsular extension; and/or
 - C. Seminal vesicle involvement; and/or
 - D. Positive lymph nodes; and/or
 - E. Gleason score 8 to 10; and/or
 - F. Detectable or rising postoperative PSA level.

DESCRIPTION

The ACR –ASTRO Practice Guideline for IMRT (2011) states that a major goal of radiation therapy is the delivery of the desired dose distribution of ionizing radiation to target tissue while limiting the radiation dose to the surrounding normal tissues to an acceptable level and thus achieving optimal patient care outcomes. This can be accomplished using IMRT.

The process of care for IMRT consists of multiple steps for treatment planning and delivery of radiation. Compared to 3D conformal radiation therapy, IMRT combines inverse treatment planning and computer-controlled intensity modulation of the photon radiation beam. Delineation of both the target volume and the surrounding tissues at risk is required to decrease the dose to volumes of non-target structures while achieving prescription doses to the target volume. An optimized treatment plan is developed that respects the target dose requirements as well as the dose constraints of the surrounding dose-limiting structures.

IMRT treatment delivery demands careful, day-by-day reproduction of the treatment plan within the patient as well as, levels of precision and accuracy that surpass the requirements of conventional radiotherapy treatment planning and delivery techniques. The IMRT process requires a coordinated team effort between the radiation oncologist, the medical physicist, the medical dosimetrist, and the radiation therapist.

In summary, the ability of IMRT to deliver the radiation dose preferentially to target structures in close proximity to organs at risk (OAR) and other non-target tissues, while minimizing the dose to normal tissues makes it an alternative to conventional 3D conformational radiation therapy.

IGRT is the use of imaging at the time of treatment delivery to ensure that the location of the target relative to the treatment beams based on a pre-determined plan is reproduced. At the time of treatment delivery, an IGRT modality is employed to determine the location of the target (and often the surrounding normal organs) at some frequency, most often at the beginning, to as often as nearly continuously throughout delivery. The target location may be determined by a range of methods from soft tissue volumetric imaging (e.g., kV or MV CT, ultrasound, magnetic resonance imaging) to localization of surrogates such as implanted fiducial markers or external surface markers or features (eg, by planar imaging or fluoroscopy, electromagnetic localization or optical surface imaging). The match or discrepancy between the simulated location and the "live" IGRT measurement at the time of treatment may be determined manually, or in some cases using automated image analysis software. If a discrepancy is found, a correction is applied. Corrections may include repositioning the patient, either through rigid corrections (shift and/or rotation) or readjustment of anatomic relationship (eg, neck and shoulder manipulations for head/neck treatments), or movement or reshaping of the radiation beam to match

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the target position, or holding the beam until the target falls in the correct location (eg, respiratory gating). In this manner, the treatment will be delivered precisely and accurately according to the treatment plan approved by the radiation oncologist.

Due to its close proximity to the prostate, the rectum may receive low doses of radiation which can cause gastrointestinal toxicities. To potentially reduce toxicities to the rectum, the SpaceOAR system (Augmenix, Inc, Waltham, MA) has been developed. The SpaceOAR system (Spacing Organs At Risk (OAR) is a hydrogel that is injected between the prostate and rectum, creating a space that moves the rectum further away from the radiation field during IMRT treatment. The hydrogel remains in place for three months during radiation treatment, and is then absorbed and leaves the body in the patient's urine. The SpaceOAR system received FDA approval in 2015.

RATIONALE

Clinical evidence supports that IMRT improves health outcomes by allowing adequate radiation therapy while minimizing damage to surrounding structures for adrenal tumors, primary brain tumors, brain metastasis, head and neck cancer, lung cancer, pancreatic cancer and other upper abdominal sites, pituitary tumors, prostate cancer and spinal cord tumors.

Breast cancer. There is interest in the use of IMRT, as compared to 3D CRT, for patients with breast cancer, as a technique of accelerated partial breast irradiation and whole-breast irradiation with concomitant boost as an alternative to whole breast irradiation therapy after breast conserving surgery. It is proposed that IMRT may reduce the effects of radiation therapy to the lung and to the heart. However, lacking data with adequate follow-up from randomized controlled trials, available clinical evidence is insufficient to determine whether IMRT is superior to 3D CRT for improving health outcomes for patients with breast cancer. The National Comprehensive Cancer Network (NCCN) guidelines for breast cancer 2021 indicate that target delineation includes the majority of breast tissue, and is best done by both clinical assessment and CT-based treatment planning. A uniform dose distribution is the objective, using compensators such as wedges, forward planning using segments, intensity modulated radiation therapy, respiratory gating, or prone positioning. The American Society for Radiation Oncology (ASTRO) consensus statement recommends that, women who are over 60 years of age, partial breast irradiation (PBI) should be performed only as part of a prospective trial. PBI can be delivered with brachytherapy or external beam radiation using 3D conformal radiation or IMRT. If not trial eligible, PBI should be reserved for patients with a low risk of recurrence.

Prostate cancer. The most recent National Comprehensive Cancer Network (NCCN) guidelines for principles of radiation therapy for prostate cancer 2021 indicate that ~~for~~ external-beam radiotherapy, 3D CRT and IMRT are techniques which allows the volume of tissue receiving high radiation doses to conform more closely to the prostate shape. IMRT is used increasingly in practice because compared to 3D CRT, some (but not all) studies indicate that it significantly reduces the risk of gastrointestinal toxicities and rates of salvage therapy, although treatment cost is increased. Results from randomized trials suggest that dose escalation is associated with improved biochemical outcomes. Evidence from randomized trials has emerged that supports the use of adjuvant/salvage radiation therapy after radical prostatectomy in men with adverse laboratory or pathological features or detectable PSA. Adverse pathological features, which include positive surgical margin(s), seminal vesicle invasion, and/or extracapsular extension, place a patient at risk for biochemical failure after prostatectomy. Biochemical failure after radical prostatectomy is defined in the National Comprehensive Cancer Network (NCCN) guidelines for principles of radiation therapy for prostate cancer (2017) as either the persistence of a detectable PSA postoperatively, or the elevation of PSA to a detectable level from a previously undetectable postoperative level.

The NCCN Guidelines Panel (2021) recommends active surveillance for men with very-low-risk prostate cancer and an estimated life expectancy-greater than or equal to 20 years, and for men with low-risk prostate cancer and estimated life expectancy of greater than or equal to 10 years. Observation is preferred for men with low-risk prostate cancer with life expectancy less than 10 years. The active surveillance recommendation involves monitoring the course of disease with the expectation to intervene with curative intent if the cancer progresses, meaning that the PSA is likely to rise, and that the tumor may grow with time. Patients must be prepared to re-evaluate the decision to defer treatment. The NCCN Guideline Panel recommends treatment in most men who demonstrate a Gleason grade of 4 or 5 on repeat biopsy, or have cancer in greater number or greater extent of prostate biopsies.

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Clinically localized prostate cancer has been categorized by the risk of recurrence as follows (Gleason system has been compressed into histologic Grade Groups by NCCN):

Recurrence Risk	Stage	Gleason Score	PSA(ng/ml)	PSADensity (ng/ml/g)	Other/Grade Group
Very Low	T1c	Less than or equal to 6	Less than 10	Less than 0.15	Less than three prostate biopsy cores positive or less than or equal to 50% cancer in any core Grade Group 1
Low	T1-T2a	Less than or equal to 6	Less than 10		Grade Group 1
Intermediate	T2b-T2c	7	10-20		Grade Group 2 or 3
High	T3a	8-10	Greater than 20		Grade Group 4 or 5
Very High	T3b-T4	8-10	any		Greater than 4 cores with Grade Group 4 or 5

The NCCN Guideline Panel 2021 includes examples of radiation therapy regimens that have shown acceptable efficacy and toxicity. The optimal regimen for an individual patient warrants evaluation of comorbid conditions, voiding symptoms, and toxicity of therapy.

The SpaceOAR system is a modality that is used to reduce rectal toxicities in men receiving IMRT for treatment of prostate cancer. Preliminary studies evaluating the effectiveness of the SpaceOAR system in reducing adverse gastrointestinal events with IMRT show a greater than 25% reduction in rectal volume receiving at least 70 Gy in the majority of men, due to spacer placement, but no difference in acute adverse events between men using the spacer and in controls who did not receive the spacer. A reduction in late rectal toxicity (three to 15 months after RT) has been observed, and no patients treated with the spacer experienced greater than grade 1 toxicity. These preliminary results are encouraging and more trials are needed to continue to evaluate the use of the SpaceOAR System especially in dose escalation, hypofractionation, stereotactic radiotherapy or re-irradiation. NCCN guidelines (2020) for principles of radiation therapy for prostate cancer state that biocompatible and biodegradable perirectal spacer materials may be implanted between the prostate and rectum in patients undergoing external radiotherapy with organ-confined prostate cancer in order to displace the rectum from high radiation dose regions. A randomized phase III trial demonstrated reduced rectal bleeding in patients undergoing the procedure, compared to controls. Retrospective data also support its use in similar patients undergoing brachytherapy. Patients with obvious rectal invasion or visible T3 or posterior extension should not undergo perirectal spacer implantation.

Life expectancy can be estimated using the Social Security Administration tables. Life expectancy can then be adjusted using the clinician's assessment of overall health.

Non small cell lung cancer and small cell lung cancer. NCCN Guidelines 2021 recommend IMRT for stage III NSCLC. This recommendation was based on the RTOG 0617 prospective trial which found that IMRT was associated with a nearly 60% decrease, from 7.9% to 3.5% in high grade radiation pneumonitis as well as similar survival and tumor control outcomes despite a higher proportion of stage IIIB and larger treatment volumes compared to 3D-CRT. The principles of radiation therapy stimulation, planning, and delivery for small cell lung cancer follow the NCCN Guidelines for NSCLC.

There are various other cancers for which the NCCN recommends the use of IMRT in special circumstances (e.g. anal cancer, esophageal cancer, and small cell lung cancer).

There are numerous clinical trials in progress regarding IMRT. These include comparative trials of IMRT for carcinoma of the breast and cervix, non-small cell lung carcinoma, pancreatic cancer, prostate cancer, and cancer of the head and/or neck.

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- Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.
- **CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.**
- Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

CPT Codes

Code	Description
31626	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed with placement of fiducial markers, single or multiple
31627	Bronchoscopy, rigid or flexible, including fluoroscopic guidance, when performed with computer-assisted, image-guided navigation (List separately in addition to code for primary procedure(s))
32553	Placement of interstitial device(s) for radiation therapy guidance (e.g., fiducial markers, dosimeter), percutaneous, intra-thoracic, single or multiple
49411	Placement of interstitial device(s) for radiation therapy guidance (eg, fiducial markers, dosimeter), percutaneous, intra-abdominal, intra-pelvic (except prostate), and/or retroperitoneum, single or multiple
55874 (NMN)	Transperineal placement of biodegradable material, peri-prostateic, single or multiple injection(s), including image guidance, when performed
77301	Intensity modulated radiotherapy plan, including dose-volume histograms for target and critical structure partial tolerance specifications
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 delivery, includes intrafraction tracking, when performed

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Code	Description
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

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ICD10 Codes

Code	Description
Numerous	

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*Key Article

Medical Policy: Intensity Modulated Radiation Therapy (IMRT)

Policy Number: 6.01.24

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KEY WORDS

IMRT, Intensity modulated radiotherapy, Intensity modulated radiation therapy, SpaceOAR®.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently no National Coverage Determination (NCD) or Local Coverage Determination (LCD) for Intensity Modulated Radiation Therapy (IMRT).

There is currently a Local Coverage Determination (LCD) for Prostate Rectal Spacers. Please refer to the following LCD website for Medicare Members: https://www.cms.gov/medicare-coverage-database/details/lcd-details.aspx?LCDId=37485&ver=14&CntrctrSelected=298*1&Cntrctr=298&s=41&DocType=Active&bc=AAgAAAQAoAAAAAA&