**Intensity Modulated Radiation Therapy (IMRT)**

**Published:** 11/01/2018

**Next Review:** 08/2019

**Last Review:** 10/2018

**Medicare Link(s) Revised:** 11/01/2018

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**IMPORTANT REMINDER**

The Medicare Advantage Medical Policy manual is not intended to override the member Evidence of Coverage (EOC), which defines the insured’s benefits, nor is it intended to dictate how providers are to practice medicine. Physicians and other healthcare providers are expected to exercise their medical judgment in providing the most appropriate care for the individual member.

The Medicare Advantage Medical Policies are designed to provide guidance regarding the decision-making process for the coverage or non-coverage of services or procedures in accordance with the member EOC and the Centers of Medicare and Medicaid Services (CMS) policies, when available. In the event of a conflict, applicable CMS policy or EOC language will take precedence over the Medicare Advantage Medical Policy. In the absence of CMS guidance for a requested service or procedure, the health plan may apply their Medical Policy Manual or MCG™ criteria, both of which are developed with an objective, evidence-based process using scientific evidence, current generally accepted standards of medical practice, and authoritative clinical practice guidelines.

Medicare and EOCs exclude from coverage, among other things, services or procedures considered to be investigational, cosmetic, or not medically necessary, and in some cases, providers may bill members for these non-covered services or procedures. Providers are encouraged to inform members in advance when they may be financially responsible for the cost of non-covered or excluded services.

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**DESCRIPTION**

“Intensity Modulated Radiation Therapy (IMRT) is a computer-based method of planning for, and delivery of generally narrow, patient specific, spatially and often temporally modulated beams of radiation to solid tumors within a patient. IMRT planning and delivery uses an approach for obtaining the highly conformal dose distributions needed to irradiate complex targets positioned near, or invaginated by, sensitive normal tissues, thus improving the therapeutic ratios. IMRT delivers a more precise radiation dose to the tumor while sparing the surrounding normal tissues by using non-uniform radiation beam intensities that are determined by various computer-based optimization techniques.” (Noridian LCD L34080)

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**MEDICARE ADVANTAGE POLICY CRITERIA**

<table>
<thead>
<tr>
<th><strong>CMS Coverage Manuals</strong>*</th>
<th>None</th>
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<tr>
<td><strong>National Coverage Determinations (NCDs)</strong>*</td>
<td>None</td>
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Noridian Healthcare Solutions (Noridian) Local Coverage Determinations (LCDs) and Articles (LCAs)*

IMRT for any indication:
- ✔ Intensity Modulated Radiation Therapy (IMRT) (L34080)

**Scroll to the “Public Version(s)” section at the bottom of the LCD for links to prior versions if necessary.

**POLICY GUIDELINES**

**REQUIRED DOCUMENTATION**

The information below must be submitted for review to determine whether policy criteria are met. If any of these items are not submitted, it could impact our review and decision outcome:

- Tumor location;
- Goals and requirements of the treatment plan, including the specific dose constraints for the target(s) and nearby critical structures;
- A statement by the treating physician documenting the special need for performing IMRT on the patient in question, rather than performing conventional or 3-dimensional treatment planning and delivery;
- Signed and dated IMRT inverse plan that meets prescribed dose constraints for the planning target volume (PTV) and surrounding normal tissue using either dynamic multi-leaf collimator (DMLC) or segmented multi-leaf collimator (SMLC) (average number of "steps" required to meet IMRT delivery is 5), or inverse planned IMRT solid compensators to achieve intensity modulation radiation delivery.
- The target verification methodology that includes documentation of the clinical treatment volume (CTV) and the planning target volume (PTV), documentation of immobilization and patient positioning, and the means of dose verification and secondary means of verification.
- Additional guidance for supporting documentation can be found on the Noridian website for Radiation Therapy Documentation Requirements.

**CROSS REFERENCES**

Charged-Particle (Proton) Radiotherapy, Medicine, Policy No. M-49

Radioembolization for Primary and Metastatic Tumors of the Liver, Medicine, Policy No. M-140

**REFERENCES**

1. Medicare Claims Processing Manual, Chapter 4 - Part B Hospital (Including Inpatient Hospital Part B and OPPS, §200.3.1 - Billing for IMRT Planning and Delivery
**NOTE:** The correct code to use for image fusion performed to provide enhanced delineation of target and normal critical structures is CPT code 77399 *(Unlisted procedure, medical radiation physics, dosimetry and treatment devices, and special services)*; however, it is considered part of the treatment planning. In addition, CPT codes 77385 and 77386 are Medicare Status “I” codes, and therefore, are not valid for Medicare or Medicare Advantage use.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>CPT</td>
<td>77301</td>
<td>Intensity modulated radiotherapy plan, including dose volume histograms for target and critical structure partial tolerance specification</td>
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<tr>
<td></td>
<td>77338</td>
<td>Multi-leaf collimator (MLC) device(s) for intensity modulated radiation therapy (IMRT), design and construction per IMRT plan</td>
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<td></td>
<td>77385</td>
<td>Intensity modulated treatment delivery, including guidance and tracking if performed; simple <em>(Not valid for Medicare purposes)</em></td>
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<tr>
<td></td>
<td>77386</td>
<td>; complex <em>(Not valid for Medicare purposes)</em></td>
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<tr>
<td>HCPCS</td>
<td>G6015</td>
<td>Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic mlc, per treatment session</td>
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<tr>
<td></td>
<td>G6016</td>
<td>Compensator-based beam modulation treatment delivery of inverse planned treatment using 3 or more high resolution (milled or cast) compensator, convergent beam modulated fields, per treatment session</td>
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*IMPORTANT NOTE:* Medicare Advantage medical policies use the most current Medicare references available at the time the policy was developed. Links to Medicare references will take viewers to external websites outside of the health plan’s web control as these sites are not maintained by the health plan.