Delivery of IMRT/SRS/SBRT

Guideline Number: MPG071.08
Approval Date: July 14, 2021

Policy Summary

Overview

**Intensity Modulated Radiation Therapy (IMRT)**

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.

The computer based optimization process is referred to as "inverse planning." Inverse planning develops a dose distribution based on the input of specific dose constraints for the planned treatment volume (PTV) and nearby clinical structures and is the beginning of the IMRT treatment planning process. The gross tumor volume (GTV), the PTV and surrounding normal tissues must be identified by a contouring procedure and the optimization must sample the dose with a grid spacing of 1 centimeter or less.

**Stereotactic Radiosurgery (SRS)**

Stereotactic Radiosurgery (SRS) combines anatomic accuracy and reproducibility with very high doses of highly precise, externally generated ionizing radiation thereby maximizing the ablative effect on the target(s) while minimizing collateral damage to adjacent tissues. Imaging, planning and treatment typically are performed in close temporal proximity. The delivery of a high dose of ionizing radiation that conforms to the shape of the lesion mandates an overall accuracy of approximately 1mm to intracranial targets and selected tumors around the base of the skull. To assure quality of patient care, the procedure involves a multidisciplinary team consisting of a neurosurgeon, radiation oncologist, and medical physicist. For tumors involving the skull base, the multidisciplinary team may include a head and neck surgeon with training in SRS.

SRS can be delivered using a variety of stereotactic and convergent-beam technologies, including, but not limited to: multiple convergent cobalt sources; protons; multiple, coplanar or non-coplanar photon arcs or angles; fixed photon arcs; or image-directed robotic devices that meet the criteria.
SRS typically is performed in a single session, using a rigidly attached stereotactic guiding device, other immobilization technology and/or a stereotactic-guidance system, but can be performed in a limited number of sessions, up to a maximum of five. If more than one session is required, the SBRT codes must be used.

**Stereotactic Body Radiation Therapy (SBRT)**

Stereotactic body radiation therapy (SBRT) is a treatment that couples a high degree of anatomic targeting accuracy and reproducibility with very high doses of extremely precise, externally generated, ionizing radiation. The therapeutic intent of SBRT is to maximize cell-killing effect on the target(s) while minimizing radiation-related injury in adjacent normal tissues.

SBRT is used to treat extra-cranial sites as opposed to stereotactic radiosurgery (SRS) which is used to treat intra-cranial and spinal targets. Treatment of extra-cranial sites excluding the spinal cord and related spinal structures requires accounting for internal organ motion as well as for patient motion. Thus, reliable immobilization or repositioning systems must often be combined with devices capable of decreasing organ motion or accounting for organ motion e.g. respiratory gating. Additionally, all SBRT is performed with at least one form of image guidance to confirm proper patient positioning and tumor localization prior to delivery of each fraction.

SBRT may be delivered in one to five sessions (fractions). Each fraction requires an identical degree of precision, localization and image guidance. Since the goal of SBRT is to intensify the potency of the radiotherapy by completing an entire course of treatment within an extremely accelerated time frame, any course of radiation treatment extending beyond five fractions is not considered SBRT and is not to be billed using these codes.

**Guidelines**

**Indications for IMRT**

IMRT is not a replacement therapy for conventional and 3-D conformal radiation therapy methods that deliver good clinical outcomes and low toxicity.

IMRT may be considered reasonable and necessary when highly conformal dose planning is required, and the patient has at least one of the following conditions met:

- An immediately adjacent volume has been irradiated and abutting portals must be established with high precision.
- Dose escalation is planned to deliver radiation doses in excess of those commonly utilized for similar tumors with conventional treatment.
- The target volume is concave or convex, and the critical normal tissues are within or around that convexity or concavity.
- The target volume is in close proximity to critical structures that must be protected.
- The volume of interest must be covered with narrow margins to adequately protect immediately adjacent structures.

On the basis of the above conditions demonstrating medical necessity, disease sites that may support the use of IMRT include the following:

- Primary or benign tumors of the central nervous system including the brain, the brain stem, and spinal cord.
- Primary head and neck malignancies, including: orbits, sinuses, skull base, aero-digestive tract, and salivary glands.
- Thoracic malignancies.
- Abdominal malignancies when dose constraints to small bowel or other normal abdominal tissue are exceeded and present administration of a therapeutic dose.
- Pelvic malignancies including: prostatic, gynecological and anal carcinoma.
- Other pelvic or retroperitoneal malignancies.

**Indications for SRS**

SRS may be considered medically reasonable and necessary for the following conditions:

- Primary central nervous system malignancies, generally used as a boost or salvage therapy for lesions under 5 cm
- As a boost treatment for larger cranial, base of skull, or spinal lesions that have been treated initially with external beam radiation therapy or surgery (e.g., sarcomas, chondrosarcomas, chordomas, and nasopharyngeal or paranasal sinus malignancies).
- Primary and secondary tumors involving the brain or spine parenchyma, meninges/dura, or immediately adjacent bony structures.
- Benign brain and spinal tumors such as cranial meningiomas, acoustic neuromas, other schwannomas, pituitary adenomas, pineocytomas, craniopharyngiomas, glomus tumors, and hemangioblastomas.
- Cranial arteriovenous malformations and hemangiomas.
- Trigeminal neuralgia not responsive to medical management.
- Metastatic brain lesions, with stable systemic disease, Karnofsky Performance Status of 40 or greater (or expected to return to 70 or greater with treatment), and otherwise reasonable survival expectations or an Eastern Cooperative Oncology Group (ECOG) performance status of 3 or less (or expected to return to 2 or less with treatment).
- Relapse in a previously irradiated cranial or spinal field where the additional stereotactic precision is required to avoid unacceptable vital tissue radiation.
- Essential tremor: limited to the patient that is refractory to conventional therapy. Refer to LCDs for coverage information where applicable.

**Indications for SBRT**

SBRT may be indicated for primary tumors and tumors metastatic to the lung, liver, kidney, adrenal gland or pancreas. SBRT may be indicated for treatment of pelvic and head and neck tumors that have recurred after primary irradiation when the following criteria are met:

- The patient’s general medical condition (notably, the performance status) justifies aggressive, curative treatment to a primary, non-metastatic cancer, or
- Metastatic disease requiring palliation cannot be treated by conventional methods due to proximity of adjacent prior irradiated volumes and other measures are not appropriate or safe for the particular patient, or
- The patient’s general medical condition (namely, the performance status) justifies aggressive local therapy to one or more deposits of metastatic cancer in an effort to achieve total disease clearance in the setting of oligometastatic disease or to reduce the patient’s overall burden of systemic disease for a specifically defined clinical benefit, and
- The targeted tumor(s) can be completely encompassed with acceptable risk to nearby critical normal structures.

**SBRT for Prostate Neoplasms**

SBRT of the prostate may be covered for patients with clinically localized prostate cancer on an individual case by case basis. Refer to LCDs for coverage information where applicable.

**Other Neoplasms**

Primary treatment of lesions of bone, breast, uterus, ovary and other internal organs not listed above are not covered.

**Other Indications for SBRT**

Except as above, any lesion with a documented necessity may be indicated for treatment of recurrence in or near previously irradiated regions when a high level of precision and accuracy or a high dose per fraction is required to minimize the risk of injury to surrounding normal tissues and treatment with conventional methods is not appropriate or safe for the particular patient.

**Applicable Codes**

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

<table>
<thead>
<tr>
<th>CPT Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>77301</td>
<td>Intensity modulated radiotherapy plan, including dose-volume histograms for target and critical structure partial tolerance specifications</td>
</tr>
<tr>
<td>77338</td>
<td>Multi-leaf collimator (MLC) device(s) for intensity modulated radiation therapy (IMRT), design and construction per IMRT plan</td>
</tr>
<tr>
<td>CPT Code</td>
<td>Description</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>77371</td>
<td>Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source Cobalt 60 based</td>
</tr>
<tr>
<td>77372</td>
<td>Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based</td>
</tr>
<tr>
<td>77373</td>
<td>Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions</td>
</tr>
<tr>
<td>77385</td>
<td>Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple</td>
</tr>
<tr>
<td>77386</td>
<td>Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex</td>
</tr>
<tr>
<td>77432</td>
<td>Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session)</td>
</tr>
<tr>
<td>77435</td>
<td>Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HCPCS Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0339</td>
<td>Image guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session or first session of fractionated treatment</td>
</tr>
<tr>
<td>G0340</td>
<td>Image guided robotic linear accelerator-based stereotactic radiosurgery, delivery including collimator changes and custom plugging, fractionated treatment, all lesions, per session, second through fifth sessions, maximum 5 sessions per course of treatment</td>
</tr>
<tr>
<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>
</tr>
<tr>
<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>
</tr>
</tbody>
</table>

**Diagnosis Codes**

There are numerous reasonable and necessary conditions that might warrant the use of these procedures, but which are too many to list. However, an appropriate ICD-10 diagnosis must be submitted with each claim and failure to do so may result in denial or delay in claim processing. The highest level of specificity should be used to report the patient’s condition. The most current ICD-10 code book should be used to ensure proper payment.

**Definitions**

**Eastern Cooperative Oncology Group (ECOG) Performance Scale:**

0 – Fully active, able to carry on all pre-disease performance without restriction.
1 – Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light housework, office work.
2 – Ambulatory and capable of all self-care but unable to carry out and work activities. Up and about more than 50% of waking hours.
3 – Capable of only limited self-care, confined to bed or chair more than 50% of waking hours.
4 – Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair.
5 – Dead

**Karnofsky Performance Scale:**

100 – Normal; no complaints, no evidence of disease
90 – Able to carry on normal activity; minor signs or symptoms of disease
80 – Normal activity with effort; some signs or symptoms of disease
70 – Cares for self; unable to carry on normal activity or to do active work
60 – Requires occasional assistance but is able to care for most needs
50 – Requires considerable assistance and frequent medical care
40 – Disabled; requires special care and assistance
30 – Severely disabled; hospitalization is indicated although death not imminent
20 – Very sick; hospitalization necessary; active supportive treatment is necessary
10 – Moribund, fatal processes progressing rapidly
0 – Dead

References

<table>
<thead>
<tr>
<th>CMS Local Coverage Determinations (LCDs) and Articles</th>
<th>LCD</th>
<th>Article</th>
<th>Contractor</th>
<th>Medicare Part A</th>
<th>Medicare Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>L33410 Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)</td>
<td>A57275 Billing and Coding: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)</td>
<td>First Coast</td>
<td>FL, PR, VI</td>
<td>FL, PR, VI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A57996 Response to Comments: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A57995 Stereotactic radiosurgery (SRS) and stereotactic body radiation therapy (SBRT) – revision to the Part A and Part B LCD and Billing and Coding Article</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L35076 Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)</td>
<td>A56874 Billing and Coding: Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)</td>
<td>NGS</td>
<td>CT, IL, MA, ME, MN, NH, NY, RI, VT WI</td>
<td>CT, IL, MA, ME, MN, NH, NY, RI, VT WI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A57921 Response to Comments: Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L36773 Intensity Modulated Radiation Therapy (IMRT)</td>
<td>A56746 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT)</td>
<td>First Coast</td>
<td>FL, PR, VI</td>
<td>FL, PR, VI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A56738 Intensity modulated radiation therapy (IMRT) revision to the Part A and Part B LCD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A55854 Response to Comments: Intensity Modulated Radiation Therapy (IMRT), L36773</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>L36711 Intensity Modulated Radiation Therapy (IMRT)</td>
<td>A56725 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT)</td>
<td>Novitas</td>
<td>AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX</td>
<td>AR, CO, DC, DE, LA, MD, MS, NJ, NM, OK, PA, TX</td>
<td></td>
</tr>
<tr>
<td>LCD</td>
<td>Article</td>
<td>Contractor</td>
<td>Medicare Part A</td>
<td>Medicare Part B</td>
<td></td>
</tr>
<tr>
<td>--------------------</td>
<td>------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------------------------------</td>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>A58236 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT)</td>
<td>Noridian</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td>A58245 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT)</td>
<td>Noridian</td>
<td>AK, AZ, ID, OR, MT, ND, SD, UT, WA, WY</td>
<td>AK, AZ, ID, OR, MT, ND, SD, UT, WA, WY</td>
<td></td>
</tr>
<tr>
<td>L34223 Stereotactic Radiosurgery Retired 01/15/2021</td>
<td>A57458 Billing and Coding: Stereotactic Radiosurgery Retired 01/15/2021</td>
<td>Noridian</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td></td>
</tr>
<tr>
<td>L34151 Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) Retired 01/15/2021</td>
<td>A57461 Billing and Coding: Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) Retired 01/15/2021</td>
<td>Noridian</td>
<td>AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY</td>
<td>AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY</td>
<td></td>
</tr>
<tr>
<td>L34080 Intensity Modulated Radiation Therapy (IMRT) Retired 08/01/2020</td>
<td>A57231 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT) Retired 08/01/2020</td>
<td>Noridian</td>
<td>AK, AZ, ID, OR, MT, ND, SD, UT, WA, WY</td>
<td>AK, AZ, ID, OR, MT, ND, SD, UT, WA, WY</td>
<td></td>
</tr>
<tr>
<td>L34217 Intensity Modulated Radiation Therapy (IMRT) Retired 08/01/2020</td>
<td>A57013 Billing and Coding: Intensity Modulated Radiation Therapy (IMRT) Retired 08/01/2020</td>
<td>Noridian</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td>AS, CA, GU, HI, MP, NV</td>
<td></td>
</tr>
</tbody>
</table>

**CMS Claims Processing Manual**

*Chapter 4; § 200.3 Billing Codes for Intensity Modulated Radiation Therapy (IMRT) and Stereotactic Radiosurgery (SRS), § 200.3.1 Billing for IMRT Planning and Delivery, § 200.3.2 Billing for Multi-Source Photon (Cobalt 60-Based) Stereotactic Radiosurgery (SRS) Planning and Delivery*

**UnitedHealthcare Commercial Policies**

*Intensity-Modulated Radiation Therapy*
*Proton Beam Radiation Therapy*
*Radiation Therapy: Fractionation, Image-Guidance, and Special Services*
*Stereotactic Body Radiation Therapy and Stereotactic Radiosurgery*

**Guideline History/Revision Information**

Revisions to this summary document do not in any way modify the requirement that services be provided and documented in accordance with the Medicare guidelines in effect on the date of service in question.

<table>
<thead>
<tr>
<th>Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/14/2021</td>
<td>Policy Summary</td>
</tr>
<tr>
<td></td>
<td><em>Intensity Modulated Radiation Therapy (IMRT)</em></td>
</tr>
<tr>
<td></td>
<td>● Removed language indicating:</td>
</tr>
<tr>
<td></td>
<td>○ IMRT uses non-uniform and customized fluence distributions in treatment delivery</td>
</tr>
</tbody>
</table>
### Delivery of IMRT/SRS/SBRT

- Delivery of IMRT requires either the use of a multi-leaf collimator (MLC) with leaves that project to a nominal 1 cm or less at the treatment unit isocenter or the use of compensator-based beam modulation treatment using three or more high resolution compensator convergent beam modulated fields.
- A MLC may use a dynamic (DMLC) or segmented mode (SMLC) to create the 3-dimensional, intensity-modulated dose distribution.
- The average segments (or steps) per gantry position required to meet IMRT delivery is five.
- The exact delivery method is not restricted as long as the particular technique chosen has the ability to model the highly modulated intensity patterns that result from the planning process described above (e.g., solid modulators or compensators may be an alternative to MLC).
- The use of a MLC just to produce simple one-dimensional ramp intensity distributions is excluded because the inverse planning process is not necessary to produce this simple intensity variation; also, the use of a MLC does not, in itself, constitute or define IMRT (for example, it is possible to use a MLC for intermediate or complex, 3D conformal therapy).
- Traditional “field-in-field technique” which is neither MLC nor compensator-based is not considered IMRT but rather external beam therapy.
- IMRT delivery imposes a more stringent requirement than conventional radiation therapy in terms of accounting for patient position and organ motion; methods that account for organ motion include but are not limited to:
  - Use of published studies on organ movement when developing the PTV.
  - Image guided adaptive radiotherapy (e.g., ultrasound guided or portal-image guided setup with implanted fiducial markers).
  - Respiratory gating of diaphragm movement for thoracic and upper abdominal sites.

### Stereotactic Radiosurgery (SRS)

- Revised language to indicate:
  - Stereotactic Radiosurgery (SRS) combines anatomic accuracy and reproducibility with very high doses of highly precise, externally generated ionizing radiation thereby maximizing the ablative effect on the target(s) while minimizing collateral damage to adjacent tissues.
  - Imaging, planning and treatment typically are performed in close temporal proximity.
  - The delivery of a high dose of ionizing radiation that conforms to the shape of the lesion mandates an overall accuracy of approximately 1 mm to intracranial targets and selected tumors around the base of the skull.
  - To assure quality of patient care, the procedure involves a multidisciplinary team consisting of a neurosurgeon, radiation oncologist, and medical physicist.
  - For tumors involving the skull base, the multidisciplinary team may include a head and neck surgeon with training in SRS.
  - SRS can be delivered using a variety of stereotactic and convergent-beam technologies, including, but not limited to:
    - Multiple convergent cobalt sources.
    - Protons.
    - Multiple, coplanar or non-coplanar photon arcs or angles.
    - Fixed photon arcs; or
    - Image-directed robotic devices that meet the criteria.
- SRS typically is performed in a single session, using a rigidly attached stereotactic guiding device, other immobilization technology and/or a stereotactic-guidance system, but can be performed in a limited number of sessions, up to a maximum of five; if more than one session is required, the SBRT codes must be used.

### Stereotactic Body Radiation Therapy (SBRT)

- Revised language to indicate:
  - Stereotactic body radiation therapy (SBRT) is a treatment that couples a high degree of anatomic targeting accuracy and reproducibility with very high doses of extremely precise, externally generated, ionizing radiation.
Summary of Changes

- The therapeutic intent of SBRT is to maximize cell-killing effect on the target(s) while minimizing radiation-related injury in adjacent normal tissues
- SBRT is used to treat extra-cranial sites as opposed to stereotactic radiosurgery (SRS) which is used to treat intra-cranial and spinal targets
- Treatment of extra-cranial sites excluding the spinal cord and related spinal structures requires accounting for internal organ motion as well as for patient motion; thus, reliable immobilization or repositioning systems must often be combined with devices capable of decreasing organ motion or accounting for organ motion e.g. respiratory gating
- All SBRT is performed with at least one form of image guidance to confirm proper patient positioning and tumor localization prior to delivery of each fraction
- SBRT may be delivered in one to five sessions (fractions)
- Each fraction requires an identical degree of precision, localization and image guidance
- The goal of SBRT is to intensify the potency of the radiotherapy by completing an entire course of treatment within an extremely accelerated time frame; any course of radiation treatment extending beyond five fractions is not considered SBRT and is not to be billed using those codes

Guidelines

Indications for IMRT

Revised language to indicate:

- IMRT is not a replacement therapy for conventional and 3-D conformal radiation therapy methods that deliver good clinical outcomes and low toxicity
- IMRT may be considered reasonable and necessary when highly conformal dose planning is required and the patient has at least one of the following conditions met:
  - An immediately adjacent volume has been irradiated and abutting portals must be established with high precision
  - Dose escalation is planned to deliver radiation doses in excess of those commonly utilized for similar tumors with conventional treatment
  - The target volume is concave or convex, and the critical normal tissues are within or around that convexity or concavity
  - The target volume is in close proximity to critical structures that must be protected
  - The volume of interest must be covered with narrow margins to adequately protect immediately adjacent structures

- On the basis of the above conditions demonstrating medical necessity, disease sites that may support the use of IMRT include the following:
  - Primary or benign tumors of the central nervous system including the brain, the brain stem, and spinal cord
  - Primary head and neck malignancies, including: orbits, sinuses, skull base, aero-digestive tract, and salivary glands OR this format
  - Primary head and neck malignancies, including:
    - Orbits
    - Sinuses
    - Skull base
    - Aero-digestive tract
    - Salivary glands
  - Thoracic malignancies
  - Abdominal malignancies when dose constraints to small bowel or other normal abdominal tissue are exceeded and present administration of a therapeutic dose
  - Pelvic malignancies including prostatic, gynecological and anal carcinomas
  - Other pelvic or retroperitoneal malignancies

Indications for SRS

Replaced language indicating “intracranial lesions would be considered medically reasonable and necessary for the [listed] conditions” with “SRS may be considered medically reasonable and necessary for the [listed] conditions”
<table>
<thead>
<tr>
<th>Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Updated list of conditions for which SRS is medically reasonable and necessary; replaced:</td>
</tr>
<tr>
<td></td>
<td>- “Primary central nervous system malignancies under 5 cm” with “primary central nervous system malignancies, generally used as a boost or salvage therapy for lesions under 5 cm”</td>
</tr>
<tr>
<td></td>
<td>- “As a boost treatment for larger cranial, base of skull, or spinal lesions that have been treated initially with external beam radiation therapy or surgery (e.g., grade III and IV gliomas, oligodendrogliomas, sarcomas, chondrosarcomas, chordomas, and nasopharyngeal or paranasal sinus malignancies)” with “as a boost treatment for larger cranial, base of skull, or spinal lesions that have been treated initially with external beam radiation therapy or surgery (e.g., sarcomas, chondrosarcomas, chordomas, and nasopharyngeal or paranasal sinus malignancies”</td>
</tr>
<tr>
<td></td>
<td>- “Metastatic brain lesions, generally limited in number, with stable systemic disease” with “metastatic brain lesions with stable systemic disease”</td>
</tr>
<tr>
<td></td>
<td>- “Essential tremor: limited to the patient that is refractory to medical management”</td>
</tr>
</tbody>
</table>

**Indications for SBRT**

- Revised language to indicate:
  - SBRT may be indicated for primary and tumors metastatic to the lung, liver, kidney, adrenal gland, or pancreas
  - SBRT may be indicated for treatment of pelvic and head and neck tumors that have recurred after primary irradiation when the following criteria are met:
    - The patient’s general medical condition (notably, the performance status) justifies aggressive, curative treatment to a primary, non-metastatic cancer; or
    - Metastatic disease requiring palliation cannot be treated by conventional methods due to proximity of adjacent prior irradiated volumes and other measures are not appropriate or safe for the particular patient; or
    - The patient’s general medical condition (namely, the performance status) justifies aggressive local therapy to one or more discreet deposits of metastatic cancer in an effort to achieve total disease clearance in the setting of oligometastatic disease or to reduce the patient’s overall burden of systemic disease for a specifically defined clinical benefit
    - The targeted tumor(s) can be completely encompassed with acceptable risk to nearby critical normal structures

**Other Neoplasms**

- Revised language to indicate primary treatment of lesions of bone, breast, uterus, ovary, and other internal organs not listed [in the policy] are not covered

**Other Indications for SBRT**

- Revised language to indicate, except as [listed in the policy] any lesion with a documented necessity may be indicated for treatment of recurrence in or near previously irradiated regions when a high level of precision and accuracy or a high dose per fraction is required to minimize the risk of injury to surrounding normal tissues and treatment with conventional methods is not appropriate or safe for the particular patient

**Supporting Information**

- Updated References section to reflect the most current information
- Archived previous policy version MPG071.07

**Purpose**

The Medicare Advantage Policy Guideline documents are generally used to support UnitedHealthcare Medicare Advantage claims processing activities and facilitate providers’ submission of accurate claims for the specified services. The document can be used as a guide to help determine applicable:

- Medicare coding or billing requirements, and/or
- Medical necessity coverage guidelines; including documentation requirements.
UnitedHealthcare follows Medicare guidelines such as NCDs, LCDs, LCAs, and other Medicare manuals for the purposes of determining coverage. It is expected providers retain or have access to appropriate documentation when requested to support coverage. Please utilize the links in the References section below to view the Medicare source materials used to develop this resource document. This document is not a replacement for the Medicare source materials that outline Medicare coverage requirements. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

**Terms and Conditions**

The Medicare Advantage Policy Guidelines are applicable to UnitedHealthcare Medicare Advantage Plans offered by UnitedHealthcare and its affiliates.

These Policy Guidelines are provided for informational purposes, and do not constitute medical advice. Treating physicians and healthcare providers are solely responsible for determining what care to provide to their patients. Members should always consult their physician before making any decisions about medical care.

Benefit coverage for health services is determined by the member specific benefit plan document* and applicable laws that may require coverage for a specific service. The member specific benefit plan document identifies which services are covered, which are excluded, and which are subject to limitations. In the event of a conflict, the member specific benefit plan document supersedes the Medicare Advantage Policy Guidelines.

Medicare Advantage Policy Guidelines are developed as needed, are regularly reviewed and updated, and are subject to change. They represent a portion of the resources used to support UnitedHealthcare coverage decision making. UnitedHealthcare may modify these Policy Guidelines at any time by publishing a new version of the policy on this website. Medicare source materials used to develop these guidelines include, but are not limited to, CMS National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Medicare Benefit Policy Manual, Medicare Claims Processing Manual, Medicare Program Integrity Manual, Medicare Managed Care Manual, etc. The information presented in the Medicare Advantage Policy Guidelines is believed to be accurate and current as of the date of publication and is provided on an "AS IS" basis. Where there is a conflict between this document and Medicare source materials, the Medicare source materials will apply.

You are responsible for submission of accurate claims. Medicare Advantage Policy Guidelines are intended to ensure that coverage decisions are made accurately based on the code or codes that correctly describe the health care services provided. UnitedHealthcare Medicare Advantage Policy Guidelines use Current Procedural Terminology (CPT™), Centers for Medicare and Medicaid Services (CMS), or other coding guidelines. References to CPT™ or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee claims payment.

Medicare Advantage Policy Guidelines are the property of UnitedHealthcare. Unauthorized copying, use, and distribution of this information are strictly prohibited.

*For more information on a specific member's benefit coverage, please call the customer service number on the back of the member ID card or refer to the Administrative Guide.