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Preauthorization is not required.

The following protocol contains medical necessity criteria that apply for this service. The criteria are also applicable to services provided in the local Medicare Advantage operating area for those members, unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. Please note that payment for covered services is subject to eligibility and the limitations noted in the patient's contract at the time the services are rendered.

Populations	Interventions	Comparators	Outcomes
Individuals: • With non-neoplastic intracranial conditions (e.g., arteriovenous malformations)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy • Medical therapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With non-neoplastic intracranial conditions (e.g., trigeminal neuralgia)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy • Medical therapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With non-neoplastic neurologic disorders (e.g., epilepsy, tremor and movement disorders, chronic pain)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy • Medical therapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With benign neoplastic intracranial lesion(s) (e.g., acoustic neuromas, pituitary adenoma, meningiomas)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity

Populations	Interventions	Comparators	Outcomes
Individuals: • With benign neoplastic intracranial lesion(s) (craniopharyngioma, glomus jugulare tumors)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With malignant neoplastic intracranial lesion(s) (e.g., gliomas, astrocytomas)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With malignant neoplastic intracranial lesion(s) (e.g., brain metastases)	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With uveal melanoma	Interventions of interest are: • Stereotactic radiosurgery	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of other forms of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity
Individuals: • With benign or malignant extracranial lesion(s) (e.g., extracranial primary and metastatic tumors) ^a	Interventions of interest are: • Stereotactic body radiotherapy	Comparators of interest are: • Other forms of radiotherapy • Surgery • Combinations of radiotherapy, surgery, or chemotherapy	Relevant outcomes include: • Overall survival • Symptoms • Treatment-related morbidity

^a Extracranial lesions include: primary spinal or vertebral body tumors, primary and metastatic tumors of the liver; primary pancreatic cancer; primary and metastatic renal cell carcinoma; metastatic adrenal cancer, and oligometastases.

Description

Stereotactic radiosurgery (SRS) and stereotactic body radiotherapy (SBRT) are 3-dimensional conformal radiotherapy methods that deliver highly focused, convergent radiotherapy beams on a target that is defined with 3-dimensional imaging techniques with the ability to spare adjacent radiosensitive structures. Stereotactic radiosurgery primarily refers to such radiotherapy applied to intracranial lesions. Stereotactic body radiotherapy refers to therapy generally applied other areas of the body. Both techniques differ from conventional external-beam radiotherapy, which involves exposing large areas of tissue to relatively broad fields of radiation over multiple sessions.

Summary of Evidence

Stereotactic Radiosurgery

For individuals who have non-neoplastic intracranial conditions (e.g., arteriovenous malformations, trigeminal neuralgia), non-neoplastic neurologic conditions (e.g., epilepsy, tremor and movement disorders, chronic pain),

benign neoplastic intracranial lesion(s) (e.g., acoustic neuromas, pituitary adenoma, meningiomas, craniopharyngioma, glomus jugulare tumors), and malignant neoplastic intracranial lesion(s) (e.g., gliomas, astrocytomas), or uveal melanoma who receive SRS, the evidence includes randomized controlled trials, non-randomized retrospective cohort studies, and observational studies or case series. Relevant outcomes are over-all survival, symptoms, and treatment-related morbidity. General limitations of the body of evidence include a lack of trials that directly compare SRS and comparators, patient heterogeneity within and between studies, and failure to use standardized methods to collect and report outcomes (benefits and harms). There are several contextual factors to consider, such as SRS offers a noninvasive, highly precise radiotherapy alternative to surgery (particularly important for patients unable to undergo resection due to the presence of underlying comorbidities), intracranial lesions often are difficult to access surgically (and may be associated with a high risk for devastating adverse sequelae), intracranial lesions typically are located adjacent to vital organs and structures that are highly susceptible to radiation toxicities, and the accuracy and precision of SRS in this context make this technique a viable alternative to standard, nonconformal external-beam radiotherapy. Finally, given the rarity of many of the conditions under review, direct comparative trials are unlikely.

The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome for patients with:

- arteriovenous malformations;
- acoustic neuromas;
- pituitary adenomas, nonresectable;
- residual, or recurrent meningiomas;
- primary malignancies of the central nervous system; and
- trigeminal neuralgia refractory to medical management.

The evidence is insufficient to determine the effects of the technology on health outcomes in patients with:

- craniopharyngiomas;
- glomus jugulare tumors;
- epilepsy;
- functional disorders other than trigeminal neuralgia;
- tremors;
- chronic pain; and
- uveal melanoma.

For individuals with craniopharyngiomas or glomus jugulare tumors, there was strong clinical support for SRS. Contextual factors considered included the rarity of these tumors, low likelihood of high-quality trials, and the potential for reduced harm compared with surgery.

Stereotactic Body Radiotherapy

For individuals who have benign or malignant extracranial lesion(s) (e.g., extracranial primary and metastatic tumors) who receive SBRT, the evidence includes a few randomized controlled trials, nonrandomized cohort studies, and case series. Relevant outcomes are overall survival, symptoms, and treatment-related morbidity. Limitations of the evidence include a lack of comparative trials, heterogeneity between patients and treatment schedules and planning techniques, and failure to use standardized methods to collect and report outcomes. SBRT has been shown to improve outcomes (reduce pain) in patients with spinal (vertebral) tumors.

The evidence is insufficient to determine the effects of the technology on health outcomes for patients with:

- spinal or vertebral body tumors (primary) in patients who have received prior radiotherapy;
- solid tumors, primary or metastatic, of the liver, pancreas, kidney, adrenal glands;
- oligometastases, except metastases to the spine.

There was strong clinical support for the use of SBRT in patients with the condition listed below. Contextual factors were considered (e.g., the lack of alternatives in inoperable patients, and the potential for reduced harm compared with surgery).

- spinal or vertebral body tumors (primary) in patients who have received prior radiotherapy.

Policy

Stereotactic radiosurgery using a gamma ray or linear accelerator unit may be considered **medically necessary** for the following indications:

- arteriovenous malformations;
- acoustic neuromas;
- pituitary adenomas;
- non-resectable, residual, or recurrent meningiomas;
- craniopharyngiomas;
- glomus jugulare tumors;
- primary malignancies of the central nervous system, including but not limited to high-grade gliomas (initial treatment or treatment of recurrence);
- trigeminal neuralgia refractory to medical management.

Stereotactic body radiotherapy may be considered **medically necessary** for the following indication:

- spinal or vertebral body tumors (primary) in patients who have received prior radiotherapy.

When stereotactic radiosurgery or stereotactic body radiotherapy are performed using fractionation (defined in the Policy Guidelines) for the medically necessary indications described above, it may be considered **medically necessary**.

Investigational applications of stereotactic radiosurgery include, but are not limited to, the treatment of seizures and functional disorders (other than trigeminal neuralgia), including chronic pain, tremor, and uveal melanoma.

Stereotactic body radiotherapy is **investigational** for primary and metastatic tumors of the liver, pancreas, kidney, and adrenal glands except as outlined in the policy statements above.

Policy Guidelines

Radiation Source

This protocol addresses the use of SRS and SBRT delivered by gamma ray or high-energy photons generated by a linear accelerator (LINAC) unit. The use of charged particle (proton or helium ion) radiotherapies is addressed in the Charged-Particle (Proton or Helium Ion) Radiotherapy Protocol.

Fractionation

Fractionated SRS refers to SRS or SBRT performed more than once on a specific site.

SRS is most often single-fraction treatment; however, multiple fractions may be necessary when lesions are near critical structures.

SBRT is commonly delivered over three to five fractions.

Medicare Advantage

Medically necessary indications for SRS/SBRT (for Cranial and Spinal Lesions only):

1. Primary central nervous system malignancies, generally used as a boost or salvage therapy for lesions < 5 cm.
2. Primary involving the brain or spine parenchyma, meninges/dura, or immediately adjacent bony structures.
3. Benign brain tumors and spinal tumors such as meningiomas, acoustic neuromas, other schwannomas, pituitary adenomas, pineocytomas, craniopharyngiomas, glomus tumors, hemangioblastomas.
4. Cranial arteriovenous malformations, cavernous malformations, and hemangiomas.
5. Other cranial non-neoplastic conditions such as trigeminal neuralgia and select cases of medically refractory epilepsy.
6. As a boost treatment for larger cranial 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).
7. Relapse in a previously irradiated cranial or spinal field where the additional stereotactic precision is required to avoid unacceptable vital tissue radiation.

Limitations for SRS/SBRT (for Cranial and Spinal Lesions). SRS is considered **not medically necessary** under the following circumstances:

1. Treatment for anything other than a severe symptom or serious threat to life or critical functions.
2. Treatment unlikely to result in functional improvement or clinically meaningful disease stabilization, not otherwise achievable.
3. Patients with wide-spread extra-cranial metastases with limited life expectancy unlikely to gain clinical benefit within their remaining life.
4. Patients with poor performance status (Karnofsky Performance Status less than 40 or an ECOG Performance greater than three) (see Medicare Advantage Policy Guidelines)
5. Cobalt-60 pallidotomy.

Medically necessary indications for Stereotactic Body Radiation Therapy (SBRT):

1. SBRT is indicated for primary tumors and tumors metastatic to the liver, kidney, adrenal gland, or pancreas.
2. SBRT is indicated for treatment of pelvic and head and neck tumors that have recurred after primary irradiation.

3. SBRT treatment, of any body site or internal organ, is 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 indicated to minimize the risk of injury to surrounding normal tissues and treatment with conventional methods is not appropriate or safe for the particular patient (medical records must describe the specific circumstances).

Limitations for Stereotactic Body Radiation Therapy (SBRT);

1. Primary treatment of lesions of bone (primary), uterus, ovary, and other internal organs not listed in the policy statements above is considered **not medically necessary**.
2. SBRT is considered **not medically necessary** under the following circumstances for any condition:
 - a. Treatment is unlikely to result in clinical cancer control and/or functional improvement.
 - b. The tumor burden cannot be completely targeted with acceptable risk to critical normal structures.
 - c. The patient has a poor performance status (Karnofsky Performance Status less than 40 or Eastern Cooperative Oncology Group (ECOG) Status of three or worse).
 - d. Recurrent (other than pelvic and head and neck tumors) or metastatic disease could be treated by conventional methods (record must describe why other radiation therapy measures are not appropriate or safe for the particular patient).

Medicare Advantage Policy Guidelines

Since the goal of SBRT is to maximize 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. SBRT is meant to represent a complete course of treatment and not to be used as a boost following a conventionally fractionated course of treatment.

Karnofsky Performance Status 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

ECOG Performance Status Scale

Grade 0: Fully active, able to carry on all pre-disease performance without restriction.

Grade 1: Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work.

Grade 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.

Grade 3: Capable of only limited self-care, confined to bed or chair more than 50% of waking hours.

Grade 4: Completely disabled. Cannot carry on any self-care. Totally confined to bed or chair.

Grade 5: Dead

Background

Conformal Radiotherapy

SRS and SBRT are techniques that use highly focused, conformal radiation beams to treat both neoplastic and non-neoplastic conditions. Although SRS and SBRT may be completed with one session (single-fraction), SRS typically refers to a single-session procedure to ablate the target lesion. However, either technique may require additional sessions (typically not more than five) over a course of days, referred to as fractionated radiotherapy.

Platforms available for SRS and SBRT are distinguished by their source of radiation; they include gamma radiation from cobalt 60 sources; high-energy photons from LINAC systems; and particle beams (e.g., protons). Particle beam therapy is not covered in this protocol.

SRS and SBRT have been used for a range of malignant and nonmalignant conditions. A comprehensive review that encompasses all potential uses is beyond the scope of this protocol. Thus, a brief introduction follows of common applications of SRS and SBRT for which published evidence has been identified in database searches.

Stereotactic Radiosurgery

Non-Neoplastic Intracranial Conditions Treated With SRS

ARTERIOVENOUS MALFORMATIONS

An arteriovenous malformation (AVM) comprises a tangled network of vessels in which blood passes from arteries to veins without intervening capillaries. AVMs range in size from small, barely detectable lesions to large lesions that can occupy an entire hemisphere. SRS incites an inflammatory response in the vessels, which results in ongoing fibrosis with eventual complete obliteration of the lesion over the course of months to years. This latency period is variable, depending on the size of the AVM and the dose distribution of the radiosurgery. During this latency period, an ongoing but declining risk of hemorrhage is present. In contrast, surgical excision provides an immediate effect on the risk of hemorrhage. Total surgical extirpation of the lesion, if possible, is the desired form of therapy to avoid future hemorrhage. However, a small subset of AVMs because of their size or location cannot be excised without serious neurologic sequelae. SRS is an alternative in selected patients.

TRIGEMINAL NEURALGIA

Trigeminal neuralgia is a disorder of the fifth cranial (i.e., trigeminal) nerve that causes episodes of intense, stabbing pain in the face. The International Classification of Headache Disorders has defined classical trigeminal neuralgia as both idiopathic and related to vascular compression. Painful trigeminal neuropathy is caused by other conditions; post herpetic, posttraumatic, secondary to multiple sclerosis plaque or a space occupying lesion.¹

Although trigeminal neuralgia is initially treated medically, in a substantial number of cases, drug treatment is either ineffective or the adverse effects become intolerable. Neurosurgical options include microvascular decompression which involves craniotomy, peripheral neurectomy or rhizotomy. Rhizotomy is a technique to percutaneously isolate the nerve and apply ablation techniques such as balloon compression, radiofrequency ablation or chemical injection. SRS of the proximal trigeminal nerve root has been investigated as an alternative

to these neurosurgical treatments. There is a latency period of approximately one month for the effect to be observed.

OTHER NEUROLOGIC DISORDERS

Seizure disorders are initially treated medically. Surgical treatment is only considered in those instances when the seizures have proven refractory to all attempts at aggressive medical management, when the frequency and severity of the seizures are so frequent and severe as to significantly diminish quality of life, and when the seizure focus can be localized to a focal lesion in a region of the brain that is accessible to resection. SRS has been investigated as an alternative to neurosurgical resection. For chronic pain that is refractory to a variety of medical and psychological treatments, there are a variety of surgical alternatives. Neurodestructive procedures include cordotomy, myelotomy, dorsal root entry zone lesions, and stereotactic radiofrequency thalamotomy. SRS targeting the thalamus has been considered an investigative alternative to these neurodestructive procedures.

SRS for the destruction of the thalamic nuclei (thalamotomy) has been proposed for a treatment of essential tremor and other forms of tremor (i.e., secondary to Parkinson disease, multiple sclerosis, or other neurologic conditions), as an alternative to medical therapy or surgical therapy in extreme cases.

Neoplastic Conditions Treated With SRS

PRIMARY INTRACRANIAL TUMORS

Acoustic neuromas, also called vestibular schwannomas, are benign tumors originating on the eighth cranial nerve, sometimes associated with neurofibromatosis, which can be linked to significant morbidity and even death if their growth compresses vital structures. The tumors arise from the Schwann cell sheath surrounding either the vestibular or cochlear branches of the eighth cranial nerve. Treatment options include complete surgical excision using microsurgical techniques; radiosurgery has also been used extensively, either as a primary treatment or as a treatment of recurrence after incomplete surgical resection.

Pituitary adenomas are benign tumors with symptoms related to hormone production (i.e., functioning adenomas) or neurologic symptoms due to their impingement on surrounding neural structures. Surgical treatment options for pituitary adenomas include excision, conventional radiotherapy, or SRS. Surgical excision is typically offered to patients with functioning adenomas; this is because complete removal of the adenoma leads to more rapid control of autonomous hormone production. The effects of SRS on hormone production are delayed or incomplete. In patients with nonfunctioning adenomas, the treatment goal is to control growth; complete removal of the adenoma is not necessary. Conventional radiotherapy has been used in this setting with an approximate 90% success rate with few complications.

Craniopharyngiomas are benign tumors that arise from pituitary embryonic tissue at the base of the gland. However, because of proximity to the optic pathways, pituitary gland, and hypothalamus, these tumors may cause severe and permanent damage to these critical structures and can even be life-threatening. Total surgical resection is often difficult.

A glomus jugulare tumor is a rare, benign tumor arising in the skull temporal bone that involves middle and inner ear structure. No consensus exists on optimal management to control tumor burden while minimizing treatment-related morbidity.

SRS has been used for the treatment of other primary brain tumors, including gliomas, meningiomas, and primitive neuroectodermal tumors (i.e., medulloblastoma, pineoblastoma). Treatment of primary brain tumors such as gliomas is more challenging, due to their generally larger size and infiltrative borders.

UVEAL MELANOMA

Melanoma of the uvea (choroid, ciliary body, and iris) is the most common, primary, malignant, intraocular tumor in adults. Established treatment modalities include enucleation, local resection, brachytherapy, and proton beam radiotherapy. The main objectives of treating the tumor are twofold: (1) to reduce the risk of metastatic spread; and (2) to salvage the eye with useful vision (if feasible). Treatment selection depends on tumor size and location, associated ocular findings, the status of the other eye, as well as other individual factors, including age, life expectancy, quality of life issues, concurrent systemic diseases, and patient expectations.

Stereotactic Body Radiotherapy

Extracranial Primary Tumors Treated With SBRT

Surgical resection is the preferred treatment of hepatocellular carcinoma—although at the time of diagnosis, less than 20% of patients are amenable to definitive surgical management due to advanced local disease or comorbidities. These patients may be candidates for local ablative therapies, including radiofrequency ablation and chemoembolization. Radiation may be considered as an alternative to local ablative/embolization therapies or if these therapies fail.

Radiation may be part of the treatment plan for pancreatic cancer, resectable or unresectable disease, and may be used in the adjuvant or neoadjuvant setting.

Localized renal cell carcinoma is conventionally treated surgically; local ablative methods may also be an option. Preoperative and adjuvant external radiation have not improved survival. However, because renal cell cancer brain metastases—although radioresistant to conventional external radiation—have been responsive to radiosurgery, interest remains in the possibility of treating primary kidney cancer with SBRT.

Extracranial Metastatic Tumors Treated With SBRT

Oligometastases are defined as isolated sites of metastasis, with the entire burden of disease being recognized as a finite number of discrete lesions that can be potentially cured with local therapies.²

In general, the indications for SBRT for oligometastases are the same as for metastasectomy. Recently proposed specific criteria for the use of SBRT in patients with oligometastases include the following: a controlled primary, favorable histology, limited metastatic disease, metachronous appearance of metastases, young age, and good performance status.²

Management of metastatic solid tumors has historically focused on systemic treatment with palliative intent. However, surgical treatment of oligometastatic disease is now common practice in some clinical settings.³ Although a cure may be possible in some patients with oligometastatic disease, the aim of SBRT in this setting is mainly to achieve local control and delay progression, which may also postpone the need for further treatment.

Metastases from NSCLC to the adrenal gland are common, and systemic treatment is the most frequent therapeutic option. Nevertheless, in patients suffering from an isolated adrenal metastasis, a survival benefit could be achieved after surgical resection.

Spinal Primary Tumors Treated With SBRT

SBRT to the spine has been most widely studied in patients requiring reirradiation, but interest has also developed in the use of SBRT for the initial treatment of spinal tumors.

Regulatory Status

Several devices that use cobalt 60 radiation (gamma ray devices) for SRS have been cleared for marketing by the U.S. Food and Drug Administration (FDA) through the 510(k) process. The most commonly used gamma ray device, approved in May 1999, is the Gamma Knife® (Elekta, Stockholm; product code IWB), which is a fixed

device used only for intracranial lesions. Gamma ray emitting devices that use cobalt 60 degradation are also regulated through the U.S. Nuclear Regulatory Commission.

A number of LINAC movable platforms that generate high-energy photons have been cleared for marketing by FDA through the 510(k) process. Examples include the Novalis Tx[®] (Novalis, Westchester, IL); the TrueBeam STx (Varian Medical Systems, Palo Alto, CA; approved December 2012; FDA product code IYE); and the CyberKnife[®] Robotic Radiosurgery System (Accuray, Sunnyvale, CA; approved December 1998; FDA product code MUJ). LINAC-based devices may be used for intracranial and extracranial lesions.

Related Protocols

Charged-Particle (Proton or Helium Ion) Radiotherapy for Neoplastic Conditions

Intensity-Modulated Radiotherapy: Abdomen and Pelvis

Intensity-Modulated Radiotherapy: Central Nervous System Tumors

Intracavitary Balloon Catheter Brain Brachytherapy for Malignant Gliomas

Services that are the subject of a clinical trial do not meet our Technology Assessment Protocol criteria and are considered investigational. *For explanation of experimental and investigational, please refer to the Technology Assessment Protocol.*

It is expected that only appropriate and medically necessary services will be rendered. We reserve the right to conduct prepayment and postpayment reviews to assess the medical appropriateness of the above-referenced procedures. **Some of this protocol may not pertain to the patients you provide care to, as it may relate to products that are not available in your geographic area.**

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.

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181. National Government Services, Inc. (Primary Geographic Jurisdiction - Illinois, New York - Entire State, Connecticut, Massachusetts, Maine, New Hampshire, Rhode Island, Vermont, Wisconsin, Minnesota) Local Coverage Determination (LCD): Stereotactic Radiation Therapy: Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (SBRT) (L35076), Revision Effective Date for services performed on or after 09/01/2017.