



Stereotactic Radiosurgery Clinical Coverage Criteria

Overview

The adjective “Stereotactic” describes a procedure during which a target lesion is localized relative to a fixed three dimensional reference system, such as a rigid head frame affixed to a patient, fixed bony landmarks, a system of implanted fiducial markers, or other similar system. This type of localization procedure allows physicians to perform image-guided procedures with a high degree of anatomic accuracy and precision.

Stereotactic Radiosurgery (SRS) is a distinct discipline that utilizes externally generated ionizing radiation in certain cases to inactivate or eradicate a defined target(s) in the head or spine without the need to make an incision. The target is defined by high-resolution stereotactic imaging. To assure quality of patient care the procedure involves a multidisciplinary team consisting of a neurosurgeon, radiation oncologist, and medical physicist. SRS is typically performed in a single session (multiple fractions may be necessary when lesions are near critical structures), 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. Technologies that are used to perform SRS include linear accelerators, particle beam accelerators, and multisource Cobalt 60 units. In order to enhance precision, various devices may incorporate robotics and real time imaging.

Stereotactic body radiation therapy (SBRT) couples this 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. SBRT is used to treat extra-cranial sites as opposed to SRS which is used to treat intra-cranial and spinal targets, and may be delivered in one to five sessions (fractions). SBRT requires computer-assisted, three-dimensional planning and delivery with stereotactic and convergent-beam technologies, including, but not limited to, multiple convergent cobalt sources (e.g. Gamma Knife®), protons, multiple, coplanar or non-coplanar photon arcs or angles (e.g. XKnife®), fixed photon arcs or image-directed robotic devices (e.g. CyberKnife®) that meet the criteria.

Policy

This Policy applies to the following Fallon Health products:

- Commercial
- Medicare Advantage
- MassHealth ACO
- NaviCare
- PACE

Prior authorization is required.

Fallon Health covers stereotactic radiosurgery (SRS) when all of the following criteria are met:

Indications:

1. Primary central nervous system malignancies, generally used as a boost or salvage therapy for lesions < 5 cm.

2. Primary and secondary tumors 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. Cranial arteriovenous malformations and hemangiomas.
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. 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).
6. Metastatic brain or spine lesions, with stable systemic disease, Karnofsky Performance Status 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). Note that the higher a Karnofsky Performance Status is, the better a patient is doing. However, the lower an Eastern Cooperative Oncology Group (ECOG) Performance Status is, the better a patient is doing.
7. Relapse in a previously irradiated cranial or spinal field where the additional stereotactic precision is required to avoid unacceptable vital tissue radiation.
8. Choroidal and other ocular melanomas.

SRS is not considered medically necessary for 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 cerebral or 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), see Karnofsky Performance Status below.
5. A claim for stereotactic cingulotomy as a means of psychotherapy, is considered to be investigational.
6. For ICD-10-CM code G25.0, essential tremor, coverage is limited to the patient who cannot be controlled with medication, has major systemic disease or coagulopathy, and who is unwilling or unsuited for open surgery. Coverage is further limited to unilateral thalamotomy. Gamma Knife pallidotomy remains non-covered and will be denied.

Karnofsky Performance Scale (Perez and Brady, p 225)

- 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.

Exclusions

- Cobalt-60 pallidotomy is not covered.
- Stereotactic radiosurgery is experimental for the treatment of functional disorders (other than trigeminal neuralgia), including chronic pain and tremor.

- Stereotactic cingulotomy as a treatment of psychiatric conditions is experimental and not covered.

Coding

The following codes are included below for informational purposes only; inclusion of a code does not constitute or imply coverage.

Radiation oncologists and neurosurgeons have separate CPT billing codes for SRS. The comprehensive CPT code 61796, 61797, 61798, 61799, 61800, 63620 and 63621 may be billed by the neurosurgeon, as one member of the team, when and only when this physician is (a) present, (b) medically necessary and (c) fully participating, in the coded course of the procedure. The medical record must clearly indicate the critical nature of the anatomy or other circumstances necessitating the services encompassed by this code.

A radiation oncologist may bill the SRS management code 77432 for single fraction SRS (and only once per treatment course) when and only when fully participating in the management of the procedure. When SRS is administered in more than one but not more than 5 fractions, the radiation oncologist may instead bill the SBRT code 77435 to cover patient management during that course of therapy; the radiation oncologist may not bill 77432 and 77435 for the same course of therapy. In addition, a radiation oncologist may bill other appropriate radiation oncology (77xxx) codes when full participation in the coded procedure(s) is appropriately documented, as directed in Medicare policies.

No one physician may bill both the neurosurgical codes 61796-61800, 63620 or 63621 and the radiation oncology codes 77371-77435.

| Code | Description |
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| 61796 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 simple cranial lesion |
| 61797 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional cranial lesion, simple |
| 61798 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 complex cranial lesion |
| 61799 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional cranial lesion, complex |
| 61800 | Application of stereotactic headframe for stereotactic radiosurgery |
| 63620 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 spinal lesion |
| 63621 | Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); each additional spinal lesion (list separately in addition to code for primary procedure) |
| 77371 | Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source Cobalt 60 based |
| 77372 | Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based |
| 77432 | Stereotactic radiation treatment management of cranial lesion(s) (complete course of treatment consisting of 1 session) |
| 77435 | Stereotactic body radiation therapy, treatment management, per treatment course, to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions |
| G0339 | Image guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session or first session of fractionated treatment |

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| G0340 | 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 |
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References

1. National Government Services, Inc. Local Coverage Determination (LCD) for Stereotactic Radiosurgery (SRS) and Stereotactic Body Radiation Therapy (L35076). Effective Date April 1, 2020. Available at: <https://www.cms.gov/medicare-coverage-database/overview-and-quick-search.aspx>.
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3. Perez CA, Brady LW, Halperin EC, Schmidt-Ullrich RK. eds. Principles and Practice of Radiation Oncology. New York, NY: Lippincott-Raven; 4th ed. 2003. Delamarter RB, Zigler J. Five-year Reoperation Rates, Cervical Total Disc Replacement versus Fusion, Results of a Prospective Randomized Clinical Trial. *Spine (Phila Pa 1976)*. 2013; 38(9):711-7.
4. American College of Radiology. ACR practice parameter for the performance of brain stereotactic radiosurgery. Revised 2016; Available at: <https://www.acr.org/-media/ACR/Files/Practice-Parameters/stereobrain.pdf>. Accessed May 21, 2020.
5. American College of Radiology. ACR–ASTRO practice parameter for the performance of stereotactic body radiation therapy. Revised 2019; Available at: <https://www.acr.org/-media/ACR/Files/Practice-Parameters/sbrrt-ro.pdf>. Accessed May 21, 2020.
6. Solberg TD, Balter JM, Benedict SH, et. al. Quality and safety considerations in stereotactic radiosurgery and stereotactic body radiation therapy: Executive summary. *Practical Radiation Oncology*. 2012;2(1):2-9.
7. American Society for Radiation Oncology (ASTRO) Stereotactic Radiosurgery (SRS) Model Policy. Available at: <https://www.astro.org/Daily-Practice/Reimbursement/Model-Policies>. Accessed May 21, 2020.

Policy history

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Not all services mentioned in this policy are covered for all products or employer groups. Coverage is based upon the terms of a member's particular benefit plan which may contain its own specific provisions for coverage and exclusions regardless of medical necessity. Please consult the product's Evidence of Coverage for exclusions or other benefit limitations applicable to this service or supply. If there is any discrepancy between this policy and a member's benefit plan, the provisions of the benefit plan will govern. However, applicable state mandates take precedence with respect to fully-insured plans and self-funded non-ERISA (e.g., government, school boards, church) plans. Unless otherwise specifically excluded, federal mandates will apply to all plans. For Medicare and Medicaid members, this policy will apply unless Medicare and Medicaid policies extend coverage beyond this policy.