

MEDICAL POLICY No. 91127-R15

STEREOTACTIC RADIOSURGERY (SRS) and STEREOTACTIC BODY RADIOTHERAPY (SBRT)

Effective Date: September 15, 2024

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Date Of Origin: July 31, 1992

Summary of Changes

Changes:

- Stereotactic radiosurgery, cranial (brain or skull base): Procedures for which medical necessity was governed by the relevant InterQual criteria are now managed by EviCore. Medical necessity is governed by the relevant EviCore clinical guideline.
- Stereotactic Body Radiation Therapy (SBRT): Priority Health has contracted with EviCore healthcare for management of stereotactic body radiation therapy (SBRT). Medical necessity will be governed by the relevant EviCore clinical guideline.
- **Proton beam radiotherapy (PBRT)**: Priority Health has contracted with Evicore for management of proton beam radiotherapy (PBRT). Medical necessity will be governed by the relevant EviCore clinical guideline.

I. POLICY/CRITERIA

A. Stereotactic radiosurgery (SRS), brain or skull base

Priority Health has contracted with EviCore healthcare for management of radiation treatment delivery, stereotactic radiosurgery (SRS) for cerebral lesions (multi-source Cobalt 60 based or linear accelerator based). Medical necessity will be governed by the relevant EviCore clinical guideline.

B. Stereotactic Body Radiation Therapy (SBRT)

Priority Health has contracted with EviCore healthcare for management of stereotactic body radiation therapy (SBRT). Medical necessity will be governed by the relevant EviCore clinical guideline.

C. Proton beam radiotherapy (PBRT)

Priority Health has contracted with EviCore healthcare for management of proton beam radiotherapy (PBRT). Medical necessity will be governed by the relevant EviCore clinical guideline.



D. Neutron beam radiotherapy (NBRT)

Priority Health may consider neutron beam radiotherapy (NBRT) **medically necessary** for the treatment of any of the following salivary gland tumors:

- a. Locally advanced tumors especially in persons with gross residual disease;
- b. Unresectable tumors
- c. Inoperable tumors.
- Priority Health considers neutron beam radiotherapy (NBRT) experimental and investigational for all other indications not outlined in I D 1 above, including, but not limited to, the following:
 - a. Pancreatic cancer
 - b. Prostate cancer
 - c. Rectal cancer
 - d. Soft tissue sarcomas
 - e. Colon cancer
 - f. Kidney cancer
 - g. Lung cancer
- E. Requests for SRS, SBRT, PBR, or NBRT may be reviewed for coverage determination for treatment in a clinical trial if the criteria of the Clinical Trials medical policy are met.



Special Notes:

• The Karnofsky performance status scale is widely used to evaluate the functional status of cancer patients to determine their eligibility for clinical trials and their prognosis.

| 70 | Cares for self; unable to carry on normal activity or to do active work. |
|-----|--|
| 80 | Normal activity with effort, some signs or symptoms of disease |
| 90 | Able to carry on normal activity; minor signs or symptoms of disease |
| 100 | Normal; no complaints; no evidence of disease |

- The Eastern Cooperative Oncology Group (ECOG) performance status is a scale used to assess how a patient's disease is progressing, assess how the disease affects the daily living abilities of the patient, and determine appropriate treatment and prognosis.
 - 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 any 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

II. MEDICAL NECESSITY REVIEW

Prior authorization for certain drug, services, and procedures may or may not be required. In cases where prior authorization is required, providers will submit a request demonstrating that a drug, service, or procedure is medically necessary. For more information, please refer to the <u>Priority Health Provider Manual</u>.

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III. APPLICATION TO PRODUCTS

Coverage is subject to member's specific benefits. Group specific policy will supersede this policy when applicable.

- ***** HMO/EPO: *This policy applies to insured HMO/EPO plans.*
- ♦ POS: This policy applies to insured POS plans.
- PPO: This policy applies to insured PPO plans. Consult individual plan documents as state mandated benefits may apply. If there is a conflict between this policy and a plan document, the provisions of the plan document will govern.
- ASO: For self-funded plans, consult individual plan documents. If there is a conflict between this policy and a self-funded plan document, the provisions of the plan document will govern.
- INDIVIDUAL: For individual policies, consult the individual insurance policy. If there is a conflict between this medical policy and the individual insurance policy document, the provisions of the individual insurance policy will govern.
- MEDICARE: Coverage is determined by the Centers for Medicare and Medicaid Services (CMS) and/or the Evidence of Coverage (EOC); if a coverage determination has not been adopted by CMS, this policy applies.
- MEDICAID/HEALTHY MICHIGAN PLAN: For Medicaid/Healthy Michigan Plan members, this policy will apply. Coverage is based on medical necessity criteria being met and the appropriate code(s) from the coding section of this policy being included on the Michigan Medicaid Fee Schedule located at: <u>http://www.michigan.gov/mdch/0,1607,7-132-2945 42542 42543 42546 42551-159815--,00.html</u>. If there is a discrepancy between this policy and the Michigan Medicaid Provider Manual located at: <u>http://www.michigan.gov/mdch/0,1607,7-132-2945 5100-87572--,00.html</u>, the Michigan Medicaid Provider Manual will govern. If there is a discrepancy or lack of guidance in the Michigan Medicaid Provider Manual, the Priority Health contract with Michigan Medicaid will govern. For Medical Supplies/DME/Prosthetics and Orthotics, please refer to the Michigan Medicaid Fee Schedule to verify coverage.

IV. DESCRIPTION

Stereotactic radiosurgery (SRS) refers to a single-fraction treatment of intracranial and spinal targets, whereas stereotactic body radiation therapy (SBRT) refers to multifractional (typically two to five fractions) treatment of intracranial, spinal, or extracranial sites, such as the lung, head and neck, liver, pancreas, and prostate.

Stereotactic body radiation therapy (SBRT) is a technique that utilizes precisely targeted radiation to a tumor while minimizing radiation to adjacent normal tissue. This targeting allows treatment of small- or moderate-sized tumors in either a single or limited number of dose fractions.

Stereotactic radiosurgery (SRS) and stereotactic radiotherapy (SRT) initially were used successfully for intracranial, orbital, and base of skull tumors, as well as benign conditions in which the skull could be used as a reference system.



The success of SRS for intracranial indications led to the development of techniques to extend this approach to extracranial targets. Stereotactic radiation therapy for extracranial sites has required significant technical advances including tumor imaging to guide radiation administration, patient immobilization, and conformal radiation delivery techniques.

SBRT has been defined by the American College of Radiology (ACR) and American Society for Radiation Oncology (ASTRO) as the use of very large doses of radiation, defined as >6 Gy/fraction given over few (five or fewer) fractions [Potters L, et. al, 2010]. SBRT has unique radiobiologic characteristics, which can cause dramatic tumor response, leading to the associated term "ablative" radiotherapy.

Stereotactic Radiosurgery, by Gamma Knife, CyberKnife or linear accelerator (LINAC), delivers precisely defined ionizing beams of radiation. Stereotactic radiosurgery is a noninvasive treatment that delivers targeted radiation to small areas of the brain in a single or few treatment sessions. Stereotactic radiation may also be delivered to extra-cranial sites by the same device (e.g. Cyberknife) and is referred to as stereotactic body radiotherapy (SBRT).

SRS and SBRT performed more than one time on a specific site are called fractionated stereotactic radiotherapy.

Stereotactic guidance may also be used to deliver proton and/or neutron beam radiotherapy.

InterQual® Procedures criteria are derived from the systematic, continuous review and critical appraisal of the most current evidence-based literature and include input from our independent panel of clinical experts. To generate the most appropriate recommendations, a comprehensive literature review of the clinical evidence was conducted. Sources searched included PubMed, Agency for Healthcare Research and Quality (AHRQ) Comparative Effectiveness Reviews, the Cochrane Library, Choosing Wisely, Centers for Medicare & Medicaid Services (CMS) National Coverage Determinations, and the National Institute of Health and Care Excellence (NICE). Other medical literature databases, medical content providers, data sources, regulatory body websites, and specialty society resources may also have been used. Relevant studies were assessed for risk of bias following principles described in the Cochrane Handbook. The resulting evidence was assessed for consistency, directness, precision, effect size, and publication bias. Observational trials were also evaluated for the presence of a dose-response gradient and the likely effect of plausible confounders. (Source: Change Healthcare LLC)



V. CODING INFORMATION

ICD-10 codes:

Not specified – see criteria

CPT/HCPCS codes:

* Services is adjuvant to primary procedure; no PA required

- 32701* Thoracic target(s) delineation for stereotactic body radiation therapy (SRS/SBRT), (photon or particle beam), entire course of treatment
- 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 (List separately in addition to code for primary procedure)
- 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 (List separately in addition to code for primary procedure)
- 61800 Application of stereotactic headframe for stereotactic radiosurgery (List separately in addition to code for primary procedure)
- 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)
- 77295* 3-dimensional radiotherapy plan, including dose-volume histograms
- 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
- 77371 Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesion(s) consisting of 1 session; multi-source Cobalt 60 based
- 77372 Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cerebral lesion(s) consisting of 1 session; linear accelerator based
- 77373 Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
- 77387* Guidance for localization of target volume for delivery of radiation treatment, includes intrafraction tracking, when performed (*Not payable under this code for Medicare & Medicaid*)

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- 77423 High energy neutron radiation treatment delivery; 1 or more isocenter(s) with coplanar or non-coplanar geometry with blocking and/or wedge, and/or compensator(s)
- 77432 Stereotactic radiation treatment management of cerebral lesion(s) (complete course of treatment consisting of one session)
- 77435 Stereotactic body radiation therapy, treatment management, per treatment course, to one or more lesions, including image guidance, entire course not to exceed 5 fractions
- 77520 Proton treatment delivery; simple, without compensation (not covered for *Medicaid*)
- 77522 Proton treatment delivery; simple, with compensation (not covered for *Medicaid*)
- 77523 Proton treatment delivery; intermediate (not covered for Medicaid)
- 77525 Proton treatment delivery; complex (not covered for Medicaid)

Facility billing only:

Revenue code:

0333 Radiation therapy (billed with 7xxxx codes listed above)

HCPCS codes:

- G0339 Image guided robotic linear accelerator base stereotactic radiosurgery, complete course of therapy in one session, or first session of fractionated treatment
- 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 five sessions per course of treatment

This service not covered:

S8030 Scleral application of tantalum ring(s) for localization of lesions for proton beam therapy

VI. **REFERENCES**:

American Society of Radiation Oncology (ASTRO). Stereotactic Body Radiation Therapy (SBRT). Model Policy. June 2020.

- Casamassima F, Cavedon C, Francescon P, *et al.* Use of motion tracking in stereotactic body radiotherapy: Evaluation of uncertainty in off-target dose distribution and optimization strategies. *Acta Oncol* 2006;45:943-947.
- CMS, Local Coverage Determination (LCD): STEREOTACTIC Radiation Therapy: STEREOTACTIC Radiosurgery (SRS) and STEREOTACTIC Body Radiation Therapy (SBRT) (<u>L35076</u>).
- Degen JW, Gagnon GJ, Voyadzis JM, *et al.* CyberKnife stereotactic radiosurgical treatment of spinal tumors for pain control and quality of life. *J Neurosurg Spine* 2005;2:540-549.

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- Hayes, Inc. Proton Beam Therapy for Non-Small Cell Lung Cancer, January 19, 2017
- Hayes, Inc. Stereotactic Radiosurgery for Trigeminal Neuralgia and Movement Disorders, February 26, 2015 and annual reviews
- Hayes, Inc. Stereotactic Body Radiation Therapy with CyberKnife Robotic Radiosurgery System (Accuray Inc.) for Monotherapy of Primary Localized Prostate Cancer, October 13, 2016 and annual reviews
- Hayes, Inc. Stereotactic Body Radiation Therapy with CyberKnife Robotic Radiosurgery System (Accuray Inc.) Boost Treatment in Primary Localized Prostate Cancer, October 20, 2016 and annual reviews.
- Gerszten P, Burton S, Ozhasoglu C, *et al.* Radiosurgery for the management of spinal metastases. In: Kondziolka D, editor. Radiosurgery. Vol 6. Basel: Karger; 2006. pp. 199-210.
- Gerszten PC, Burton SA, Belani CP, *et al.* Radiosurgery for the treatment of spinal lung metastases. *Cancer* 2006;107:2653-2661.
- Gerszten PC, Burton SA, Ozhasoglu C, *et al.* Radiosurgery for the management of spinal metastases. In: Kondziolka D, editor. Radiosurgery. Vol 6. Basel: Karger; 2006. pp. 199-210.
- Gerszten PC, Burton SA, Ozhasoglu C, et al. Stereotactic radiosurgery for spinal metastases from renal cell carcinoma. J Neurosurg Spine 2005;3:288-295.
- Gerszten PC, Burton SA, Quinn AE, et al. Radiosurgery for the treatment of spinal melanoma metastases. *Stereotact Funct Neurosurg* 2005;83:213-221.
- Gerszten PC, Burton SA, Welch WC, *et al.* Single-fraction radiosurgery for the treatment of spinal breast metastases. *Cancer* 2005;104:2244-2254.
- Koong AC, Christofferson E, Le QT, *et al.* Phase II study to assess the efficacy of conventionally fractionated radiotherapy followed by a stereotactic radiosurgery boost in patients with locally advanced pancreatic cancer. *Int J Radiat Oncol Biol Phys* 2005;63:320-323.
- Koong AC, Le QT, Ho A, *et al.* Phase I study of stereotactic radiosurgery in patients with locally advanced pancreatic cancer. *Int J Radiat Oncol Biol Phys* 2004;58:1017-1021.
- Le QT, Loo BW, Ho A, *et al.* Results of a phase I dose-escalation study using single-fraction stereotactic radiotherapy for lung tumors. *Journal of Thoracic Oncology* 2006;1:802-809.
- Mitin T. Radiation therapy techniques in cancer treatment. UpToDate. January 14, 2022 (literature review current through March 2022).
- Nuyttens JJ, Prevost JB, Praag J, *et al.* Lung tumor tracking during stereotactic radiotherapy treatment with the CyberKnife: Marker placement and early results. *Acta Oncol* 2006;45:961-965.
- Oken MM, Creech RH, Tormey DC et-al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am. J. Clin. Oncol. 1983;5 (6): 649-55. <u>Pubmed citation</u>
- Potters L, Kavanagh B, Galvin JM, Hevezi JM, Janjan NA, Larson DA, Mehta MP, Ryu S, Steinberg M, Timmerman R, Welsh JS, Rosenthal SA. American Society for Therapeutic Radiology and Oncology (ASTRO) and

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American College of Radiology (ACR) practice guideline for the performance of stereotactic body radiation therapy. Int J Radiat Oncol Biol Phys. 2010;76(2):326.

Sinclair J, Chang SD, Gibbs IC, et al. Multisession CyberKnife radiosurgery for intramedullary spinal cord arteriovenous malformations. *Neurosurgery* 2006;58:1081-1089; discussion 1081-1089.

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