Approved by: Optum Medical and Pharmacy Subcommittee	**Effective Date:** 10/01/25
Clinical Policy Document: Stereotactic Body Radiation Therapy	**Date Approved:** 09/10/25
Reference #: MC/L013	**Replaces Effective Clinical Policy Dated**: 09/10/24

TABLE OF CONTENTS

PLANS IN SCOPE

Aspirus Health Plan

BACKGROUND & PURPOSE:

Stereotactic body radiation therapy (SBRT) uses 3D image guidance to identify the exact tumor location so radiation can be administered directly to the cancer cells.

The intent of this policy is to provide coverage guidelines for SBRT.

Please refer to the member's benefit document for specific information. To the extent there is any inconsistency between this policy and the terms of the member's benefit plan or certificate of coverage, the terms of the member's benefit plan document will govern.

COVERAGE INDICATIONS:

General coverage indications

- All healthcare services must be ordered by a provider
- All healthcare services must be medically necessary
- All applicable conservative treatments must have been tried

SBRT is indicated for the treatment of (1) secondary, or metastatic, tumors and (2) recurrent tumors or (3) any tumor arising within or near previously irradiated volumes when at least one of the following criteria is met and specifically documented in the medical record:

I. Functional status justifies aggressive local therapy to achieve disease clearance in the setting of oligo-progressive metastasis
II. Reduction of overall burden of systemic disease for a specified clinical benefit is desired
III. In cases of pulmonary involvement:
    i. Inoperable non-small cell lung cancer
    ii. Surgery would carry more risk due to functional status, comorbidities, and complication risks
IV. Recurrent disease requiring palliation for symptoms control such as pain
V. Any tumor that cannot be treated as effectively or safely by other radiotherapy methods due to
    i. Proximity of previously irradiated volumes and
    ii. A high level of precision and accuracy needed to minimize risk to surrounding paraspinous tissues.
    iii. Radioresistant histology
VI. Lesions in vertebral bodies (especially when associated with painful metastases from solid malignancies)

Exclusions

While SBRT is not an innovative technology, there is a need for continued clinical evidence development and comparative effectiveness analyses for the appropriate use of SBRT for various disease sites. SBRT is not considered medically necessary under any of the following circumstances:

I. Treatment is unlikely to result in clinical cancer control and/or functional improvement (ex. widespread progressive disease with metastasis and the prognosis is unfavorable)
II. The tumor burden cannot be completely targeted with acceptable risk to nearby critical normal structures.
III. Patients with poor performance status (Karnofsky Performance Status less than 40 or ECOG Status of 3 or worse.

Safety and efficacy have not been proven in the following populations:

I. Irresectable pancreatic cancer (unless for palliation)
II. Hepatic cell carcinoma with Child Pugh score > B7 (decompensated cirrhosis with ascites, encephalopathy, or jaundice)

Medical Records Documentation

Benefit coverage is determined by review of member specific benefit plan information and all applicable laws. Medical records documentation may be required to assess if the member meets criteria; however, provision of records does not guarantee coverage.

DEFINITIONS

Child Pugh Score: Score used to interpret the level of liver disease. Ranges from Class A (normal function) to Class C (severe liver dysfunction)

CyberKnife: SBRT treatment system that delivers high doses of radiation to tumors while minimizing damage to surrounding tissue

ECOG Performance Status Scale: Scale ranging from 0 to 5 which describes function including ability to care for self, daily activity, and physical activity. The higher the score the less functional ability.

Karnofsky Performance Scale: Scale ranging from 0 to 100 which defines functional impairment. The lower the score the less likely recovery from a serious illness.

Metastasis: Cancer where the original tumor has spread to at least one other site

Oligo-progressive metastasis: Small number of metastasis 5 or less

Palliation: To improve symptoms of the disease without removing the disease itself

Paraspinous region: the muscles and soft tissue surrounding the spine

Radiation therapy: Use of high-energy particles or waves to destroy or damage cancer cells. Radiation therapy works by injuring DNA inside the cancer cells to keep them from growing and dividing. Radiation can also damage normal or healthy cells.

APPLICABLE CODES

Note: The code list below is provided for guidance. Not all procedures will contain these codes. Code coverage will depend on coverage guidelines above. All intrauterine procedure coverage requests will require medical review.

Code Type	Code	Description
77263	CPT	Therapeutic radiology treatment planning; complex
77293	CPT	Respiratory motion management simulation
77295	CPT	3-dimensional radiotherapy plan, including dose-volume histograms
77300	CPT	Basic radiation dosimetry calculation, central axis depth dose calculation, TDF, NSD, gap calculation, off axis factor, tissue inhomogeneity factors, calculation of non-ionizing radiation surface and depth dose
77301	CPT	Intensity modulated radiotherapy plan, including dosevolume histograms for target and critical structure partial tolerance specifications
77334	CPT	Treatment devices, design, and construction; complex (irregular blocks, special shields, compensators, wedges, molds or casts), custom immobilization devices
77338	CPT	Multi-leaf collimator (MLC) device(s) for intensity modulated radiation therapy (IMRT), design and construction, per IMRT plan
77370	CPT	Special medical radiation physics consultation
77373	CPT	Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions
77435	CPT	Stereotactic body radiation therapy, treatment management, per treatment course, to one or more lesions, including image guidance, entire course not to exceed 5 fractions
77470	CPT	Special treatment procedures (e.g., total body irradiation, hemi body radiation, per oral or endocavitary irradiation)

POLICY/REVISION HISTORY

Date	Summary of Changes	Approval By
09/10/25	Initial Policy Development	Optum Medical and Pharmacy Subcommittee

REFERENCES:

American Society for Radiation Oncology (n.d.) Model policies: Stereotactic body radiation therapy (SBRT). www.astro.org. Accessed 08/27/25.

Bae, S. H., Chun, S. J., Chung, J. H., Kim, E., Kang, J. K., Jang, W. I., Moon, J. E., Roquette, I., Mirabel, X., Kimura, T., Ueno, M., Su, T. S., Tree, A. C., Guckenberger, M., Lo, S. S., Scorsetti, M., Slotman, B. J., Kotecha, R., Sahgal, A., Louie, A. V., … Kim, M. S. (2024). Stereotactic Body Radiation Therapy for Hepatocellular Carcinoma: Meta-Analysis and International Stereotactic Radiosurgery Society Practice Guidelines. International journal of radiation oncology, biology, physics, 118(2), 337–351. https://doi.org/10.1016/j.ijrobp.2023.08.015

Bible, K. C., Kebebew, E., Brierley, J., Brito, J. P., Cabanillas, M. E., Clark, T. J., Jr, Di Cristofano, A., Foote, R., Giordano, T., Kasperbauer, J., Newbold, K., Nikiforov, Y. E., Randolph, G., Rosenthal, M. S., Sawka, A. M., Shah, M., Shaha, A., Smallridge, R., & Wong-Clark, C. K. (2021). 2021 American Thyroid Association Guidelines for Management of Patients with Anaplastic Thyroid Cancer. Thyroid : official journal of the American Thyroid Association, 31(3), 337–386. https://doi.org/10.1089/thy.2020.0944

Bindels, B. J. J., Mercier, C., Gal, R., Verlaan, J. J., Verhoeff, J. J. C., Dirix, P., Ost, P., Kasperts, N., van der Linden, Y. M., Verkooijen, H. M., & van der Velden, J. M. (2024). Stereotactic Body and Conventional Radiotherapy for Painful Bone Metastases: A Systematic Review and Meta-Analysis. JAMA network open, 7(2), e2355409. https://doi.org/10.1001/jamanetworkopen.2023.55409

Choi, H. S., Jeong, B. K., Kang, K. M., Jeong, H., Song, J. H., Ha, I. B., & Kwon, O. Y. (2020). Tumor Control and Overall Survival after Stereotactic Body Radiotherapy for Pulmonary Oligometastases from Colorectal Cancer: A Meta-Analysis. Cancer research and treatment, 52(4), 1188–1198. https://doi.org/10.4143/crt.2020.402

Cirino, E., Benedict, S. H., Dupre, P. J., Halvorsen, P. H., Kim, G. G., Reyhan, M. L., Schneider, C. W., Wang, L., Weaver, C. P., & Yoo, S. (2025). AAPM-RSS Medical Physics Practice Guideline 9.b: SRS-SBRT. Journal of applied clinical medical physics, 26(4), e14624. https://doi.org/10.1002/acm2.14624

Faruqi, S., Chen, H., Fariselli, L., Levivier, M., Ma, L., Paddick, I., Pollock, B. E., Regis, J., Sheehan, J., Suh, J., Yomo, S., & Sahgal, A. (2022). Stereotactic Radiosurgery for Postoperative Spine Malignancy: A Systematic Review and International Stereotactic Radiosurgery Society Practice Guidelines. Practical radiation oncology, 12(2), e65–e78. https://doi.org/10.1016/j.prro.2021.10.004

Guckenberger, M., Andratschke, N., Belka, C., Bellut, D., Cuccia, F., Dahele, M., Guninski, R. S., Josipovic, M., Mancosu, P., Minniti, G., Niyazi, M., Ricardi, U., Munck Af Rosenschold, P., Sahgal, A., Tsang, Y., Verbakel, W., & Alongi, F. (2024). ESTRO clinical practice guideline: Stereotactic body radiotherapy for spine metastases. Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology, 190, 109966. https://doi.org/10.1016/j.radonc.2023.109966

Laeseke, P., Ng, C., Ferko, N., Naghi, A., Wright, G. W. J., Wang, D., Laidlaw, A., Kalsekar, I., Amos, T., Laxmanan, B., Ghosh, S. K., Zhou, M., Szapary, P., & Pritchett, M. (2025). Stereotactic body radiation therapy and thermal ablation for treatment of patients with pulmonary metastases: a systematic literature review and meta-analysis. BMC pulmonary medicine, 25(1), 188. https://doi.org/10.1186/s12890-025-03561-9

Laeseke, P., Ng, C., Ferko, N., Naghi, A., Wright, G. W. J., Zhang, Y., Laidlaw, A., Kalsekar, I., Laxmanan, B., Ghosh, S. K., Zhou, M., Szapary, P., & Pritchett, M. (2023). Stereotactic body radiation therapy and thermal ablation for treatment of NSCLC: A systematic literature review and meta-analysis. Lung cancer (Amsterdam, Netherlands), 182, 107259. https://doi.org/10.1016/j.lungcan.2023.107259

Persson, A. E., Hallqvist, A., Bjørn Larsen, L., Rasmussen, M., Scherman, J., Nilsson, P., Tønnesen, H., & Gunnlaugsson, A. (2024). Stereotactic body radiotherapy as metastasis-directed therapy in oligometastatic prostate cancer: a systematic review and meta-analysis of randomized controlled trials. Radiation oncology (London, England), 19(1), 173. https://doi.org/10.1186/s13014-024-02559-7

Song, X., Wei, J., Sun, R., Jiang, W., Chen, Y., Shao, Y., & Gu, W. (2023). Stereotactic Body Radiation Therapy Versus Conventional Radiation Therapy in Pain Relief for Bone Metastases: A Systematic Review and Meta-Analysis. International journal of radiation oncology, biology, physics, 115(4), 909–921. https://doi.org/10.1016/j.ijrobp.2022.10.017

Viani, G. A., Gouveia, A. G., Yan, M., Matsuura, F. K., & Moraes, F. Y. (2022). Stereotactic body radiotherapy versus surgery for early-stage non-small cell lung cancer: an updated meta-analysis involving 29,511 patients included in comparative studies. Jornal brasileiro de pneumologia : publicacao oficial da Sociedade Brasileira de Pneumologia e Tisilogia, 48(3), e20210390. https://doi.org/10.36416/1806-3756/e20210390

Vornhülz, M., Anton, S., Eross, B., Szakács, Z., Hegyi, P., Regel, I., Belka, C., Niyazi, M., Mayerle, J., & Beyer, G. (2022). Role of stereotactic body radiation in the enhancement of the quality of life in locally advanced pancreatic adenocarcinoma: a systematic review. Radiation oncology (London, England), 17(1), 108. https://doi.org/10.1186/s13014-022-02076-5

Wu, Q., Gao, W., Zhu, J., Wang, Q., & Zhang, W. (2020). *Zhongguo fei ai za zhi = Chinese journal of lung cancer*, *23*(12), 1066–1072. https://doi.org/10.3779/j.issn.1009-3419.2020.101.50

Yan, M., Louie, A. V., Kotecha, R., Ashfaq Ahmed, M., Zhang, Z., Guckenberger, M., Kim, M. S., Lo, S. S., Scorsetti, M., Tree, A. C., Sahgal, A., & Slotman, B. J. (2023). Stereotactic body radiotherapy for Ultra-Central lung Tumors: A systematic review and Meta-Analysis and International Stereotactic Radiosurgery Society practice guidelines. Lung cancer (Amsterdam, Netherlands), 182, 107281. https://doi.org/10.1016/j.lungcan.2023.107281

Nondiscrimination & Language Access Policy

Discrimination is Against the Law. Aspirus Health Plan, Inc. complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex, (including sex characteristics, including intersex traits; pregnancy or related conditions; sexual orientation, gender identity and sex stereotypes), consistent with the scope of sex discrimination described at 45 CFR § 92.101(a)(2). Aspirus Health Plan, Inc. does not exclude people or treat them less favorably because of race, color, national origin, age, disability, or sex.

Aspirus Health Plan, Inc.:
Provides people with disabilities reasonable modifications and free appropriate auxiliary aids and services to communicate effectively with us, such as:

- Qualified sign language interpreters.
- Written information in other formats (large print, audio, accessible electronic formats, other formats).

Provides free language assistance services to people whose primary language is not English, which may include:

- Qualified interpreters.
- Information written in other languages.

If *you* need reasonable modifications, appropriate auxiliary aids and services, or language assistance services, contact the Nondiscrimination Grievance Coordinator at the address, phone number, fax number, or email address below.

If *you* believe that Aspirus Health Plan, Inc. has failed to provide these services or discriminated in another way on the basis of race, color, national origin, age, disability, or sex, *you* can file a *grievance* with:

Nondiscrimination Grievance Coordinator
Aspirus Health Plan, Inc.
PO Box 1890
Southampton, PA 18966-9998
Phone: 1-866-631-5404 (TTY: 711)
Fax: 763-847-4010
Email: customerservice@aspirushealthplan.com

You can file a *grievance* in person or by mail, fax, or email. If *you* need help filing a *grievance*, the Nondiscrimination Grievance Coordinator is available to help *you*.

You can also file a civil rights complaint with the U.S. Department of Health and Human Services, Office for Civil Rights, electronically through the Office for Civil Rights Complaint Portal, available at https://ocrportal.hhs.gov/ocr/portal/lobby.jsf, or by mail or phone at:

U.S. Department of Health and Human Services
200 Independence Avenue, SW
Room 509F, HHH Building
Washington, D.C. 20201
1.800.368.1019, 800.537.7697 (TDD)

Complaint forms are available at http://www.hhs.gov/ocr/office/file/index.html. This notice is available at Aspirus Health Plan, Inc.'s website: https://aspirushealthplan.com/webdocs/70021-AHP-NonDiscrim_Lang-Assist-Notice.pdf.

Language Assistance Services

Albanian: KUJDES: Nëse flitni shqip, për ju ka në dispozicion shërbime të asistencës gjuhësore, pa pagesë.Telefononi në 1-800-332-6501 (TTY: 711).

Arabic تنبيه: إذا كنت تتحدث اللغة العربية، فإن خدمات المساعدة اللغوية متاحة لك مجاناً. اتصل بن اعلى رقم الهاتف1-800-332-6501(رقم هاتف الصم والبك : 711)

French: ATTENTION: Si vous parlez français, des services d'aide linguistique vous sont proposés gratuitement. Appelez le 1-800-332-6501 (ATS: 711).

German: ACHTUNG: Wenn Sie Deutsch sprechen, stehen Ihnen kostenlos sprachliche Hilfsdienstleistungen zurVerfügung. Rufnummer: 1-800-332-6501 (TTY: 711).

Hindi: _यान द_: य_द आप ि हंदी बोलते ह_ तो आपके ि लए मु_त म_ भाषा सहायता सेवाएं उपल_ध ह_।1-800-332-6501 (TTY: 711) पर कॉल कर_।

Hmong: LUS CEEV: Yog tias koj hais lus Hmoob, cov kev pab txog lus, muaj kev pab dawb rau koj. Hu rau 1-800-332-6501 (TTY: 711).

Korean: 주의: 한국어를 사용하시는 경우, 언어 지원 서비스를 무료로 이용하실 수 있습니다.1-800-332-6501 (TTY: 711)번으로 전화해 주십시오.

Polish: UWAGA: Jeżeli mówisz po polsku, możesz skorzystać z bezpłatnej pomocy językowej. Zadzwoń pod numer1-800-332-6501 (TTY: 711).

Russian: ВНИМАНИЕ: Если вы говорите на русском языке, то вам доступны бесплатные услуги перевода.Звоните 1-800-332-6501 (телетайп: 711).

Spanish: ATENCIÓN: si habla español, tiene a su disposición servicios gratuitos de asistencia lingüística. Llame al1-800-332-6501 (TTY: 711).

Tagalog: PAUNAWA: Kung nagsasalita ka ng Tagalog, maaari kang gumamit ng mga serbisyo ng tulong sa wika nangwalang bayad. Tumawag sa 1-800-332-6501 (TTY: 711).

Traditional Chinese: 注意：如果您使用繁體中文， 您可以免費獲得語言援助服務。請 致電 1-800-332-6501 (TTY: 711)

Vietnamese: CHÚ Ý: Nếu bạn nói Tiếng Việt, có các dịch vụ hỗ trợ ngôn ngữ miễn phí dành cho bạn. Gọi số 1-800-332-6501 (TTY: 711).

Pennsylvania Dutch: Wann du Deitsch (Pennsylvania German / Dutch) schwetzscht, kannscht du mitaus Koschte ebbergricke, ass dihr helft mit die englisch Schprooch. Ruf selli Nummer uff: Call 1-800-332-6501 (TTY: 711).

Lao: ໂປດຊາບ: ຖ້າວ່າ ທ່ານເວົ້າພາສາ ລາວ, ການບໍລິການຊ່ວຍເຫຼືອດ້ານພາສາ,ໂດຍບໍ່ເສັງຄ່າ, ແມ່ນມີພ້ອມໃຫ້ທ່ານ. ໂທຣ 1-800-332-6501 (TTY: 711).