

UPDATED 06.01.2019 CLINICAL GUIDELINES

Radiation Therapy



Overview Statement

The purpose of these clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to improve patient outcomes. These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. The healthcare professionals are responsible for all clinical decisions based on their assessment. These clinical guidelines do not provide authorization, certification, explanation of benefits, or guarantee of payment, nor do they substitute for, or constitute, medical advice.

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Radiation Therapy Utilizing 2D-3D for the Breast

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the breast may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 4913 Radiation therapy utilizing 2D-3D for ductal carcinoma in situ (DCIS) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group (ECOG) Performance Status Grade is less than one (1) OR Karnofsky Performance Status (KPS) Grade is greater than or equal to eighty (80) and the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of twenty (20) fractions or less;
 - Treatment to be delivered consists of 21-28 fractions for patient who is 69 years of age or younger; and **ANY** of the following:
 - S Pathology report shows lymphovascular invasion (LVI);1,6
 - § Tumor is estrogen receptor negative;
 - S Tumor is high grade; 5
 - S Tumor is greater than 2 cm; 4, 5
 - Surgical resection margins are less than 5 mm; 4, 5
 - Treatment to be delivered consists of 29-33 fractions with delivery of a boost for patient who is 69 years of age or younger; and **ANY** of the following:
 - **§** Pathology report shows lymphovascular invasion (LVI); ₆



- § Tumor is estrogen receptor negative;
- **§** Tumor is high grade;
- S Tumor is greater than 2 cm; 4,5
- Surgical resection margins are less than 5 mm. 4, 5
- Ind. 4915 Radiation therapy utilizing 2D-3D for breast metastasis and palliation may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following: ₂
 - Daily cone beam CT will be used; 2
 - Daily motion management will be used; 2
 - Special Physics Consult has been ordered;
 - Treatment to be delivered consists of 10 fractions or less and the patient is receiving treatment for **ANY** of the following: ₂
 - Sone metastasis; 7
 - § Pain control;
 - S Airway obstruction;
 - S GI bleeding;
 - S Palliative care with an ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80). 2,7

Ind. 4916 Radiation therapy utilizing 2D-3D for breast post mastectomy may be reasonable and appropriate when the patient's ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80 and the patient's medical record demonstrates the following:



- Treatment to be delivered consists of 28 fractions or less, patient is 75 years of age or younger; and **ANY** of the following:
 - S Tumor is 5 cm in diameter or larger; 5
 - **§** Four (4) or more positive axillary nodes (either clinically or pathologically);
 - S High-risk patient with a high grade, estrogen receptor negative tumor, pathology report shows lymphovascular invasion; and ANY of the following:
 - Tumor is less than 5 cm in diameter; 5
 - One (1)-three (3) positive lymph nodes; 4
 - Lymph node negative.
- Ind. 4914 Radiation therapy utilizing 2D-3D for Stage I or II breast cancer following a lumpectomy may be reasonable and appropriate when the patient's ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates ANY of the following:
 - Treatment to be delivered consists of 20 fractions or less and EITHER of the following:
 - Patient is 70 years of age or older
 Patient is 69 years of age or younger
 - Treatment to be delivered consists of 21-28 fractions for patient who is 69 years of age or younger; and **ANY** of the following:
 - Pathology report shows lymphovascular invasion (LVI); 36Tumor is estrogen receptor negative; 3 Tumor is high grade; 3,5Tumor is greater than 2 cm; 3,4,5Surgical resection margins are less than 5 mm; 3,4,5
 - Treatment to be delivered consists of 29-33 fractions with delivery of a boost for patient who is 69 years of age or younger; and **ANY** of the following:



- Pathology report shows lymphovascular invasion (LVI); 6Tumor is estrogen receptor negative; Tumor is high grade; 6Tumor is greater than 2 cm; 4,5Surgical resection margins are less than 5 mm. 4,5
- Ind. 4917 Radiation therapy utilizing 2D-3D for Stage III breast cance<u>r</u> may be reasonable and appropriate when the patient's ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 20 fractions or less;
 - Treatment to be delivered consists of 21-28 fractions for a patient who is 69 years of age or younger; and **ANY** of the following:
 - Pathology report shows lymphovascular invasion (LVI); ₆Tumor is estrogen receptor negative; Tumor is high grade; ₅Tumor is greater than 2 cm; _{4,5}Surgical resection margins are less than 5 mm; _{4,5}
 - Treatment to be delivered consists of 29-36 fractions with delivery of a boost for a patient who is 69 years of age or younger; and **ANY** of the following:
 - S Pathology report shows lymphovascular invasion (LVI); 6
 - S Tumor is estrogen receptor negative; Tumor is high grade; 5Tumor is greater than 2 cm; 4, 5Surgical resection margins are less than 5 mm. 4,5



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Radiation Therapy Utilizing Brachytherapy/MammoSite/SAVI/ Contura for the Breast

Delivery of radiation therapy for Brachytherapy/MammoSite/SAVI/Contura for the breast may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 4918 Radiation therapy utilizing Brachytherapy/MammoSite/SAVI/Contura for ductal carcinoma in situ (DCIS) may be reasonable and appropriate when the patient's medical record demonstrates the ALL of the following:
 - Treatment to be delivered consists 10 fractions or less; 1,4,6Age is 46 years or older;1Tumor is 3 cm or less; 3,5,6Surgical margins are negative. 2, 3, 4, 5, 6
- Ind. 4919 Radiation therapy utilizing Brachytherapy/MammoSite/SAVI/Contura for Stage I or II breast cancer following a lumpectomy may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Treatment to be delivered consists 10 fractions or less; _{3,4,6}Age is 46 years or older; Tumor is 3 cm or less; _{3,6}Surgical margins are negative. _{2,3,4,6}



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Radiation Therapy Utilizing IMRT for the Breast

Delivery of Radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the breast may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

Ind. 4923 Radiation therapy utilizing IMRT for ductal carcinoma in situ (DCIS) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates the following:Patient who is 69 years of age or younger with breast cancer of the left breast; 1 and EITHER of the following:

- S Treatment to be delivered consists of 28 fractions or less; and ANY of the following: 4
 - Patient is high risk with V20 of the lungs that is greater than 35% with a 3D plan, IMRT plan will improve the v20 by greater than10%;
 1,2,3
 - Chest wall separation is greater than 20 cm; 2
 - 10cc or more of the contoured heart will receive 25 Gy using 3DCRT, the dose to the heart will be reduced by greater than 20% if IMRT is used compared to 3D; 1,2,3,5
 - The 3D plan resulted in hot spots greater than 115% of the prescription dose and IMRT will reduce these hot spots by at least 20%;_{2,5}
- S Treatment to be delivered consists 29-33 fractions; and ALL of the following:



- A boost is to be given as part of this requested treatment course;
 4V20 of the lungs is GREATER than 35% with a 3D plan; 2,3
- IMRT plan will improve the v20 by greater than 10%.2
- Ind. 4924 Radiation therapy utilizing IMRT for early stage breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - S Treatment to be delivered consists of 36 fractions or less; and ALL of the following:
 - S Patient has cancer of the left breast; 1
 - § Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - 9 Patient is high risk;
 - S Age is 75 years or younger; and ANY of the following:
 - An IMRT plan will improve the v20 by greater than 10%; 2
 - V20 of the lungs is greater than 35% with a 3D plan; 2,3
 - Chest wall separation is greater than 20 cm; 2
 - 10cc or more of the contoured heart will receive 25 Gy using 3DCRT and the dose to the heart be reduced by greater than 20% if IMRT is used compared to 3D; 1,2,3,5
 - The 3D plan resulted in hot spots greater than 115% of the prescription dose and IMRT will reduce these hot spots by at least 20%;_{2,5}
 - § Treatment to be delivered consists of 36 fractions or less; and ALL of the following:
 - Patient has left or right breast cancer; Internal mammary (IM) nodes are being contoured and treated; and ANY of the following: 1



- Patient has pathologically enlarged IM nodes on CT/MRI/PET; IM nodes are positive on biopsy; Patient has four (4) or more positive axillary nodes (either clinically or pathologically); 1Tumor is in the medial quadrant. 1
- Ind. 4926 Radiation therapy utilizing IMRT for breast post mastectomy may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - S Treatment to be delivered consists of 36 fractions or less for a patient who is 75 years of age or younger, Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and BOTH of the following:
 - Patient has breast cancer of the left breast; 4Patient is high risk; and ANY of the following:
 - S An IMRT plan will improve the v20 by greater than 10%;_{2,7}V20 of the lungs is greater than 35% with a 3D plan; _{2,3,7}Chest wall separation is greater than 20 cm; _{2,7}10cc or more of the contoured heart will receive 25 Gy using3DCRT and the dose to the heart will be reduced by greater than 20% if IMRT is used compared to 3D; _{2,3,5,7}The 3D plan will result in hot spots greater than 115% of the prescription dose and IMRT will reduce these hot spots by at least 20%; _{2,5}
 - Treatment to be delivered consists of 36 fractions or less for a patient who is 75 years of age or younger; and **BOTH** of the following:
 - S Patient has left or right breast cancer; 6
 - Internal mammary (IM) nodes are being contoured and treated; and ANY of the following: 6
 - Patient has pathologically enlarged IM nodes on CT/MRI/PET; 7



- IM nodes are positive on biopsy; 6
- Patient has four (4) or more positive axillary nodes (either clinically or pathologically); 7
- Tumor is in the medial quadrant of the breast.
- Ind. 4927 Radiation therapy utilizing IMRT for Stage III breast cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 36 fractions or less for a patient who is 75 years of age or younger; and ALL of the following:
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); Patient has cancer of the left breast; 1,4Patient is high risk; and ANY of the following:
 - An IMRT plan will improve the v20 by greater than 10%; 2,
 - V20 of the lungs is greater than 35% with a 3D plan; 2, 3
 - Chest wall separation is greater than 20 cm; 2
 - 10cc or more of the contoured heart will receive 25 Gy using 3DCRT and the dose to the heart will be reduced by greater than 20% if IMRT is used compared to 3D; 1, 2, 3, 5
 - The 3D plan will result in hot spots greater than 115% of the prescription dose and IMRT will reduce these hot spots by at least 20%;_{2,5}
 - Treatment to be delivered consists of 36 fractions or less; and **BOTH** of the following:
 - Patient has right or left breast cancer; Internal mammary (IM) nodes are being contoured and treated; and ANY of the following: 1
 - Patient has pathologically enlarged IM nodes on CT/MRI/PET; 1



- IM nodes are positive on biopsy; 1
- Patient has four (4) or more positive axillary nodes (either clinically or pathologically); 1
- Tumor is in the medial quadrant. 1



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Radiation Therapy Utilizing IORT for the Breast

Delivery of radiation therapy utilizing IORT (Intraoperative Radiation Therapy) for the breast may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 4928 Radiation therapy utilizing IORT for ductal carcinoma in situ (DCIS) may be reasonable and appropriate when the patient's medical record demonstrates ALL of the following:
 - Age is 46 years or older;₂Surgical margins are negative;_{4,5}Patient will receive a single fraction during surgery _{1,2,3,4,5}Tumor is 3.5 cm or less. _{1,2,3}
- Ind. 4929 Radiation therapy utilizing IORT for Stage I or II breast cancer following a lumpectomy may be reasonable and appropriate when the patient's medical record demonstrates ALL of the following:
 - Age is 46 years or older; ² Surgical margins are negative; ⁴, ⁶Electronic brachytherapy is being used; ⁶, ⁷Patient will receive a single fraction during surgery; ¹, ²,⁴, ⁵Tumor is 3.5 cm or less. ¹,²



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Radiation Therapy Utilizing 2D-3D for the Lung

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the lung may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5060 Radiation therapy utilizing 2D-3D for Stage I or II non-small cell lung cancer (NSCLC) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is being treated under palliative care; 1, 4Treatment to be delivered consists of 35 fractions or less for patient with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80). 1, 8
- Ind. 5065 Radiation therapy utilizing 2D-3D for Stage III NSCLC may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for a patient who is being treated under palliative care; 1,4Treatment to be delivered consists of 35 fractions or less with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80). 1,8



- Ind. 5070 Radiation therapy utilizing 2D-3D for lung cancer palliation_may be reasonable and appropriate for delivery of 10 fractions or less when the patient's medical record demonstrates **ANY** of the following:
 - Patient is being treated under palliative care; 1, 2, 3, 4The purpose of the radiation is to relieve airway obstruction 3, 4The purpose of the radiation is to relieve hemoptysis; 2, 3, 4Patient is being treated for metastatic disease to the bone. 3, 4
- Ind. 5075 Radiation therapy utilizing 2D-3D for limited stage small cell lung cancer (SCLC) may be reasonable and appropriate when the patient's medical record demonstrates
 ANY of the following:
 - Treatment to be delivered consists of 10 fractions or less for a patient who is being treated under palliative care; 4,Treatment to be delivered consists of 35 fractions or less with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);Treatment to be delivered consists of 10 fractions or less for prophylactic cranial radiation. 6
- Ind. 5080 Radiation therapy utilizing 2D-3D for extensive stage SCLC may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for a patient who is being treated under palliative care; 4,Treatment to be delivered consists of 35 fractions or less with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);Treatment to be delivered consists of 10 fractions or less for prophylactic cranial radiation.₆



- Ind. 5090 Radiation therapy utilizing 2D-3D for mesothelioma of the lung may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for a patient who is being treated under palliative care; 5,6Treatment to be delivered consists of 35 fractions or less with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80). 7



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Radiation Therapy Utilizing Brachytherapy for the Lung

Delivery of radiation therapy utilizing Brachytherapy for the lung may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5064 Radiation therapy utilizing Brachytherapy for Stage I or II non-small cell lung cancer (NSCLC) may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 8 fractions or less; and **EITHER** of the following:
 - S Patient will receive 2D-3D as part of this treatment course; 2, 4
 - Wedge section is being performed prior to brachytherapy;12,3, and
 EITHER of the following:
 - Patient has received radiation therapy within the last 6 months; 5
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).



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Radiation Therapy Utilizing IMRT for the Lung

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the lung may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

Ind. 5061 Radiation therapy utilizing IMRT for Stage I or II non-small cell lung cancer (NSCLC) 1 may be reasonable and appropriate when the patient's medical record demonstrates the following:

- Treatment to be delivered consists of 35 fractions or less ₇; and **EITHER** of the following:
 - **§** Patient is high risk;
 - S Radiation therapy requested is being used for curative intent, a 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT would substantially decrease normal tissue toxicity; and EITHER of the following: 4,7
 - The same area or an immediately adjacent area received previous external radiation therapy (XRT); 4
 - There has been some form of motion management implemented (either 4D CT, respiratory gating or breath hold technique; and ANY of the following: 4, 7
 - With a 3D plan, the spinal cord receives greater than 50 Gy to a point dose; 7



- With a 3D plan, there are hot spots greater than 115% of the prescription dose and IMRT reduces these hotspots by greater than 15%; 7
- There is a reduction of the V20 of at least 10% with the IMRT plan over the 3D plan with a 3D plan, the V20 is greater than 35%._{4,7}

Ind. 5066 Radiation therapy utilizing IMRT for Stage III NSCLC 1 may be reasonable and appropriate when the patient's medical record demonstrates the following:

- Treatment to be delivered consists of 35 fractions or less₇; and **EITHER** of the following:
 - **§** Patient is high risk;
 - S Radiation therapy requested is being used for curative intent, a 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT would substantially decrease normal tissue toxicity; and the following: 4, 7
 - There has been some form of motion management implemented (either 4D CT, respiratory gating or breath hold technique; 7 and ANY of the following:
 - With a 3D plan, the spinal cord receives greater than 50 Gy to a point dose; 7
 - With a 3D plan, there are hot spots greater than 115% of the prescription dose and IMRT reduces these hotspots by greater than 15%; 7
 - There is a reduction of the V20 of at least 10% with the IMRT plan over the 3D plan with a 3D plan, the V20 is greater than 35%.4, 5, 7
 - Has the same or immediately adjacent area received previous radiation therapy. 4



- Ind. 5076 Radiation therapy utilizing IMRT for limited stage small cell lung cancer (SCLC) ₂ may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 35 fractions or less; and **EITHER** of the following:
 - **§** Patient is high risk;
 - S Radiation therapy requested is being used for curative intent, a 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT would substantially decrease normal tissue toxicity; and the following: 4,8
 - There has been some form of motion management implemented (either 4D CT, respiratory gating or breath hold technique; and ANY of the following: 4, 8
 - With a 3D plan, the spinal cord receives greater than 50 Gy to a point dose;
 - With a 3D plan, there are hot spots greater than 115% of the prescription dose and IMRT reduces these hotspots by greater than 15%;
 - There is a reduction of the V20 of at least 10% with the IMRT plan over the 3D plan with a 3D plan, the V20 is greater than 35%.4,8

Has the same or immediately adjacent area received previous radiation therapy. 4Ind. 5081 Radiation therapy utilizing IMRT for extensive stage SCLC 2 may be reasonable and appropriate when the patient's medical record demonstrates that the treatment to be delivered consists of 35 fractions or less, radiation therapy requested is being used for curative intent, a 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT would substantially decrease normal tissue toxicity; and there has been some form of



motion management implemented (either 4D CT, respiratory gating or breath hold technique; and **ANY** of the following: $_{4, 6}$



- With a 3D plan, the spinal cord receives greater than 50 Gy to a point dose;
 With a 3D plan, there are hot spots greater than 115% of the prescription dose and IMRT reduces these hotspots by greater than 15%; There is a reduction of the V20 of at least 10% with the IMRT plan over the 3D plan with a 3D plan, the V20 is greater than 35%.4,6
- Has the same or immediately adjacent area received previous radiation therapy. 4
- Ind. 5093 Radiation therapy utilizing IMRT for mesothelioma of the lung ₃ may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 35 fractions or less ₉; and **EITHER** of the following:
 - **§** Patient is high risk;
 - S Radiation therapy requested is being used for curative intent, a 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT would substantially decrease normal tissue toxicity; and the following: 4, 10
 - There has been some form of motion management implemented (either 4D CT, respiratory gating or breath hold technique; and ANY of the following: 9, 10
 - With a 3D plan, the spinal cord receives greater than 50 Gy to a point dose; 9, 10



- With a 3D plan, there are hot spots greater than 115% of the prescription dose and IMRT reduces these hotspots by greater than 15%; 9,10
- S There is a reduction of the V20 of at least 10% with the IMRT plan over the 3D plan with a 3D plan, the V20 is greater than 35%. 9, 10
- Has the same or immediately adjacent area received previous radiation therapy 4



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Radiation Therapy Utilizing SBRT for the Lung

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5063 Radiation therapy utilizing SBRT for Stage I or II non-small cell lung cancer (NSCLC) may be reasonable and appropriate₂ when the patient's medical record demonstrates **EITHER** of the following:
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);Patient is high risk, is enrolled in a clinical protocol and is receiving chemotherapy during the course of the treatment;
 - S Treatment to be delivered consists of 5 fractions or less; and ANY of the following 5, 7, 8
 - **§** Patient is enrolled in a clinical protocol; 5, 8
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY of the following:
 - This is for definitive/curative therapy, motion management is being used 2 and high risk; 5, 7, 8
 - This is for definitive/curative therapy, motion management is being used ₂ and tumor is 5 cm or less; 1, 5, 7, 8
 - Tumor is 5 cm or less, motion management is being used ₂ and area being treated is the only known site of disease. ₅



- Ind. 5068 Radiation therapy utilizing SBRT for Stage III NSCLC may be reasonable and appropriate ₂ when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less 7 to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used 2,7; and ANY of the following:
 - S Patient received radiation therapy to this location previously;
 - S Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy. 1
- Ind. 5072 Radiation therapy utilizing SBRT for lung cancer palliation_may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less 7 to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; 2, 7 and ANY of the following:
 - S Patient received radiation therapy to this location previously; 1
 - S Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy.



- Ind. 5079 Radiation therapy utilizing SBRT for limited stage small cell lung cancer (SCLC) may be reasonable and appropriate 3 when the patient's medical record demonstrates EITHER of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and ANY of the following:
 - S Patient received radiation therapy to this location previously; 1
 - S Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy.
- Ind. 5084 Radiation therapy utilizing SBRT for extensive stage SCLC may be reasonable and appropriate 3 when the patient's medical record demonstrates EITHER of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and ANY of the following:
 - S Patient received radiation therapy to this location previously; 1
 - S Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy.


- Ind. 5094 Radiation therapy utilizing SBRT for mesothelioma of the lung may be reasonable and appropriate ₄ when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and ANY of the following:
 - S Patient received radiation therapy to this location previously; 1,6
 - S Patient is being treated for an isolated recurrence; 6
 - This is for definitive/curative therapy.



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Radiation Therapy Utilizing 2D-3D for Head and Neck

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the head and neck may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

Ind. 5141 Radiation therapy utilizing 2D-3D for nasopharyngeal cancer (any stage) of the head and neck may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:

- Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1,2Treatment to be deliver consists of 11-35 fractions; and **EITHER** of the following:
 - S Concurrent chemo is being used; 2,5,8
 - Section Patient is high risk.
- Ind. 5146 Radiation therapy utilizing 2D-3D for cancer of the oral cavity (includes tongue, floor of mouth, hard palate, buccal mucosa, or mandible cancer, any stage) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1, 2 Treatment to be deliver consists of 35 fractions or less; and **EITHER** of the following:



- S Concurrent chemo is being used; 2, 3, 8
- 9 Patient is high risk.
- Ind. 5151 Radiation therapy utilizing for cancer originating in the oropharynx (base of tongue, tonsil, or epiglottis) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; _{1,2}Treatment to be deliver consists of 35 fractions or less; and **EITHER** of the following:
 - S Concurrent chemo is being used; 2,3,4,7,8
 - 9 Patient is high risk. 4
- Ind. 5156 Radiation therapy utilizing 2D-3D for cancer originating in the larynx or hypopharynx may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1,2 Treatment to be deliver consists of 35 fractions or less; and **EITHER** of the following:
 - S Concurrent chemo is being used; 2,8
 - **§** Patient is high risk.
- Ind. 5161 Radiation therapy utilizing 2D-3D for cancer originating in the salivary gland (parotid, submandibular, or minor salivary glands) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1, 2Treatment to be deliver consists of 35 fractions or less; and EITHER of the following:
 - S Concurrent chemo is being used; 2,8



- **§** Patient is high risk.
- Ind. 5165 Radiation therapy utilizing 2D-3D for cancer originating in the sinuses may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1, 2Treatment to be deliver consists of 35 fractions or less; and EITHER of the following:
 - S Concurrent chemo is being used; 2,8
 - **§** Patient is high risk.
- Ind. 5175 Radiation therapy utilizing 2D-3D for head and neck cancer of any origin that has metastasized may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1, 2Patient is high risk;
- Ind. 5180 Radiation therapy utilizing 2D-3D for squamous cell cancer that has spread to the neck lymph nodes with no known primary, may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1, 2Treatment to be deliver consists of 35 fractions or less; and EITHER of the following:
 - S Concurrent chemo is being used; 2, 6, 8
 - **§** Patient is high risk. ₆
- Ind. 5170 Radiation therapy utilizing 2D-3D for thyroid cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:



- Treatment to be delivered consists of 10 fractions or less for patient who is receiving palliative care; 1,2Treatment to be deliver consists of 30 fractions or less; and **EITHER** of the following:
 - S Concurrent chemo is being used; 2,8
 - **§** Patient is high risk.



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Radiation Therapy Utilizing Brachytherapy for the Head and Neck

Delivery of radiation therapy utilizing Brachytherapy for the head and neck may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5145 Radiation therapy utilizing Brachytherapy for nasopharyngeal cancer (any stage) _{2,4} being administered for a recurrence may be reasonable and appropriate when the patient's medical record demonstrates the **ALL** of following:
 - Treatment to be delivered consists of 5 fractions or less t for recurrence; ₆A boost is to be given as part of this requested treatment course ₆;
 Brachytherapy is going to use a high dose rate source; and EITHER of the following:
 - 5 The patient will also receive 2D-3D as part of this treatment course; 5
 - S The patient will also receive IMRT therapy as part of this treatment course (25 fractions or less). 3, 5
- Ind. 5150 Radiation therapy utilizing Brachytherapy for any stage of cancer of the oral cavity (including tongue, floor of mouth, hard palate, buccal mucosa, or mandible) _{1,2} being administered for a recurrence may be reasonable and appropriate when the patient's medical record demonstrates the ALL of following:



- Treatment to be delivered consists of 5 fractions or less for recurrence _{6,8}; A boost is to be given as part of this requested treatment course ₆; Brachytherapy is going to use a high dose rate source; and EITHER of the following:
 - **§** The patient will also receive 2D-3D as part of this treatment course; 5, 7, 8
 - S The patient will also receive IMRT therapy as part of this treatment course (25 fractions or less). 3, 5, 7, 8
- Ind. 5155 Radiation therapy utilizing Brachytherapy for cancer originating in the oropharynx (base of tongue, tonsil, or epiglottis) _{1, 2} being administered for a recurrence may be reasonable and appropriate when the patient's medical record demonstrates the ALL of following:
 - Treatment to be delivered consists of 5 fractions or less in a high risk patient for recurrence ₆; A boost is to be given as part of this requested treatment course ₆; Brachytherapy is going to use a high dose rate source; and EITHER of the following:
 - S The patient will also receive 2D-3D as part of this treatment course; 5
 - S The patient will also receive IMRT therapy as part of this treatment course (25 fractions or less). 5
- Ind. 5160 Radiation therapy utilizing Brachytherapy for cancer originating in the larynx or hypopharynx_{1, 2} being administered for a recurrence may be reasonable and appropriate when the patient's medical record demonstrates the **ALL** of following:
 - Treatment to be delivered consists of 5 fractions or less in a high risk patient for recurrence ₆; A boost is to be given as part of this requested treatment course ₆; Brachytherapy is going to use a high dose rate source; and EITHER of the following:



- S The patient will also receive 2D-3D as part of this treatment course; 5
- S The patient will also receive IMRT therapy as part of this treatment course (25 fractions or less). 5



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Radiation Therapy Utilizing IMRT for the Head and Neck

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) of the head and neck may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5142 Radiation therapy utilizing IMRT for nasopharyngeal cancer (any stage) _{3,5} may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan ₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less_{1,5,9} to the same or immediately adjacent area received previous XRT and patient is considered high risk. 4,9Treatment to be delivered consists of 35 fractions or less_{1,5,9} and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; 4and ANY of the following:
 - Patient will receive any other type of radiation as part of this treatment course; 1, 2, 7
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2,9
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7,
 9
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7,9



- With a 3D plan does the optic chiasm receive greater than 45Gy; 2,9
- With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5147 Radiation therapy utilizing IMRT for cancer of any stage to the oral cavity (including tongue, floor of mouth, hard palate, buccal mucosa, or mandible) ₃may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered high risk. 9Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - Patient will receive any other type of radiation as part of this treatment course; 2, 7
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2, 7
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
 - With a 3D plan does the optic chiasm receive greater than 45Gy; 2
 - With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5152 Radiation therapy utilizing IMRT for cancer originating in the oropharynx (base of tongue, tonsil or epiglottis) ₃may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered



high risk. ₉Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and **ANY** of the following:

- §
- With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2,7
- With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7
- With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
- With a 3D plan does the optic chiasm receive greater than 45Gy; 2
- With a 3D plan, the spinal cord will receive greater than 45Gy. 2

Ind. 5157 Radiation therapy utilizing IMRT for cancer originating in the larynx or hypopharynx₃ may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan ₈, when the patient's medical record demonstrates **EITHER** of the following:

- Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered high risk. 9Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - S Patient will receive any other type of radiation as part of this treatment course; 3, 7
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2, 7
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
 - With a 3D plan does the optic chiasm receive greater than 45Gy; 2
 - With a 3D plan, the spinal cord will receive greater than 45Gy. 2



- Ind. 5162 Radiation therapy utilizing IMRT for cancer originating in the salivary glands (parotid, submandibular, or minor salivary glands) ³ may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan ⁸, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered high risk. 9Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2,7
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
 - With a 3D plan does the optic chiasm receive greater than 45Gy; 2
 - With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5166 Radiation therapy utilizing IMRT for cancer originating in the sinuses ₃may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan ₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered high risk. 9Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2,7
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy;



- With a 3D plan the D50 to the contralateral parotid is greater than 24Gy;
 2,7
- With a 3D plan does the optic chiasm receive greater than 45Gy; 2
- With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5176 Radiation therapy utilizing IMRT for head and neck cancer of any origin that has metastasized may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 20 fractions or less ₃to the same or immediately adjacent area received previous XRT and patient is considered high risk.Treatment to be delivered consists of 20 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2, 7
 - § With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; $_{\rm 2,}$ $_{\rm 7}$
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
 - With a 3D plan does the optic chiasm receive greater than 45Gy; 2
 - With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5181 Radiation therapy utilizing IMRT for squamous cell cancer that has spread to the neck lymph nodes_{3,6} with no known primary may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan ₈, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered



high risk.₉Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and **ANY** of the following:

- With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2, 7
- With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy; 2, 7
- With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
- With a 3D plan does the optic chiasm receive greater than 45Gy; 2
- With a 3D plan, the spinal cord will receive greater than 45Gy. 2
- Ind. 5171 Radiation therapy utilizing IMRT for cancer of the thyroid ₃may be reasonable and appropriate when a 3D plan has been performed and compared to the IMRT plan _{8,9}, when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less to the same or immediately adjacent area received previous XRT and patient is considered high risk.9Treatment to be delivered consists of 35 fractions or less and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and ANY of the following:
 - With a 3D plan the Dmax to the mandible is greater than 60 Gy; 2, 7
 - With a 3D plan the D50 to the ipsilateral parotid is greater than 30 Gy;
 - With a 3D plan the D50 to the contralateral parotid is greater than 24Gy; 2,7
 - With a 3D plan, the spinal cord will receive greater than 45Gy. 2



- Nabil F. Saba, MD,1* Joseph K. Salama, MD,2 Jonathan J. Beitler, MD, MBA,3 Paul M. Busse, MD, PhD,4 Jay S. Cooper, MD,5 Christopher U. Jones, MD,6 Shlomo Koyfman, MD,7 Harry Quon, MD, MS,8 John A. Ridge, MD, PhD,9 Farzan Siddiqui, MD, PhD,10 Francis Worden, MD,11 Min Yao, MD, PhD,12Sue S. Yom, MD, PhD. ACR Appropriateness Criteria for nasopharyngeal carcinoma. Published online 30 April 2016 in Wiley Online Library (wileyonlinelibrary.com). DOI 10.1002/hed.24423. HEAD & NECK—DOI 10.1002/HED JULY 2016
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Radiation Therapy Utilizing SBRT for the Head and Neck

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for the head and neck may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5144 Radiation therapy utilizing SBRT for nasopharyngeal cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less 1,4, 5 to treat three (3) lesions or less in an area of 3 cm or less 4,5 for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 5 and ANY of the following:
 - Seal Patient is being treated for an isolated recurrence 1,3,4,5;
 - S This is for definitive/curative therapy. 3
- Ind. 5149 Radiation therapy utilizing SBRT for cancer of any stage of the oral cavity (including tongue, floor of mouth, hard palate, buccal mucosa, or mandible) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less 1,4,5 to treat three (3) lesions or less in an area of 3 cm or less 4,5 for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a



KPS Grade of greater than or equal to eighty $(80)_5$ and Motion management will be used; and **BOTH** of the following:

- Patient is being treated for an isolated local recurrence ; 1, 3, 4
- S This is for definitive/curative therapy. 3
- Ind. 5154 Radiation therapy utilizing SBRT for cancer originating in the oropharynx (base of tongue, tonsil, or epiglottis) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated;Treatment to be delivered consists of 5 fractions or less 1,4,5 to treat three (3) lesions or less in an area of 3 cm or less 4 for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 5 and Motion management will be used; and BOTH of the following:
 - S Patient is being treated for an isolated recurrence; 1, 3, 4, 5
 - § This is for definitive/curative therapy. 3
- Ind. 5159 Radiation therapy utilizing SBRT for cancer originating in the larynx or hypopharynx may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated;Treatment to be delivered consists of 5 fractions or less 1,4,5 to treat three (3) lesions or less in an area of 3 cm or less_{4,5} for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 5 and Motion management will be used; and BOTH of the following:
 - S Patient is being treated for an isolated recurrence; 1, 3, 4, 5
 - S This is for definitive/curative therapy. 3



- Ind. 5178 Radiation therapy utilizing SBRT for head and neck cancer of any origin that has metastasized may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions or less 1,4,5 to treat three (3) lesions or less in an area of 3 cm or less 4,5 for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80)₅ and Motion management will be used; and EITHERof the following:
 - S Patient received radiation therapy to this location previously 2 and this is for definitive/curative therapy;
 - S Patient is being treated for an isolated recurrence_{1, 3, 4, 5};
- Ind. 5228 Radiation therapy utilizing SBRT for primary sarcoma of the head and neck may be reasonable and appropriate when the patient's medical record demonstrates ANY of the following:
 - The patient has four (4) or more lesions being treated;
 - Treatment to be delivered consists of 5 fractions or less 1, 4, 5 to treat three
 (3) lesions or less in an area of 3 cm or less 4 5 for patient with Eastern
 Cooperative Oncology Group ECOG Performance Status Grade of less than
 or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 5 and ANY of the following:
 - **§** Patient is being treated for an isolated recurrence; 1, 3, 4, 5
 - S This is for definitive/curative therapy; 3
 - **§** Patient received radiation therapy to this location previously. 1, 2, 3



- Ind. 5140 Radiation therapy utilizing SBRT for treatment of Trigeminal Neuralgia or Facial pain may be reasonable and appropriate when the patient's medical record demonstrates ANY of the following:
 - o The patient's trigeminal neuralgia pain in intractable to pain medications;
 - o This is a repeat procedure;
 - o Surgery has been attempted previously



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Radiation Therapy Utilizing 2D-3D for the Gastrointestinal System

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the gastrointestinal (GI) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5270 Radiation therapy utilizing 2D-3D for esophageal cancer may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 1 and their medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;2
 - Treatment to be delivered consists of 11-28 fractions; and **ANY** of the following:
 - S Treatment is being delivered postoperatively (adjuvant); 2

Treatment being delivered is neoadjuvant (prior to planned surgery); _{2, 10, 11}Ind. 5290 Radiation therapy utilizing 2D-3D for gastric cancer may be reasonable and appropriate when the Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **EITHER** of the following:

Treatment to be delivered consists of 10 fractions or less for palliative care;
 2Treatment to be delivered consists of 11-28 fractions; and ANY of the following:



- S Treatment is being delivered postoperatively (adjuvant); 2,6, 12
- § Treatment being delivered is neoadjuvant (prior to planned surgery); 2,6, 12
- Treatment to be delivered consists of 29-33 fractions for definitive treatment.₂
- Ind. 5285 Radiation therapy utilizing 2D-3D for rectal cancer may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;
 2Treatment to be delivered consists of 11-28 fractions; and ANY of the following:
 - S Treatment is being delivered postoperatively (adjuvant); 2, 4, 15
 - § Treatment being delivered is neoadjuvant (prior to planned surgery); 2, 3, 13, 15
 - Treatment to be delivered consists of 29-33 fractions for definitive treatment. 2
- Ind. 5255 Radiation therapy utilizing 2D-3D for anal cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care when the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); 2Treatment to be delivered consists of 30 fractions or less for definitive treatment. 2, 14



- Ind. 5275 Radiation therapy utilizing 2D-3D for Liver cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care₇when the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); ₂Treatment to be delivered consists of 30 fractions or less; and EITHER of the following: ₇
 - S Treatment is being delivered postoperatively (adjuvant); 2,7

Treatment is definitive_2Ind. 5280 Radiation therapy utilizing 2D-3D for pancreatic cancer may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty and their medical record demonstrates EITHER of the following:

- Treatment to be delivered consists of 10 fractions or less for palliative care;_{2,8}Treatment to be delivered consists of 11-28 fractions ₈; and ANY of the following:
 - Treatment is being delivered postoperatively (adjuvant); 2, 5,8, 16
 Treatment being delivered is neoadjuvant (prior to planned surgery); 2,8
- Treatment to be delivered consists of 29-33 fractions for definitive therapy. 8
- Ind. 5260 Radiation therapy utilizing 2D-3D for biliary tree cancer (gallbladder or Klatskin's tumor) may be reasonable and appropriate when the patient's medical record demonstrate the following:



- Treatment to be delivered consists of 10 fractions or less for palliative care; 2, 7Treatments to be delivered consists of 30 fractions or less 7 with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and EITHER of the following:
 - S This is for definitive treatment; 2, 7, 17
 - S Treatment is being delivered postoperatively (adjuvant) 2, 3, 7, 17
- Ind. 5265 Radiation therapy utilizing 2D-3D for colon cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; 2, 9Treatment to be delivered consists of 30 fractions or less 9 with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and EITHER of the following:
 - Staging and pathology of the tumor is T4; 9
 - **§** Positive tumor margins are present. 9

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Radiation Therapy Utilizing Brachytherapy for the Gastrointestinal System

Delivery of radiation therapy utilizing Brachytherapy for the gastrointestinal (GI) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5261 Radiation therapy utilizing Brachytherapy for biliary cancer (gallbladder or Klatskin's tumor) may be reasonable and appropriate 1 when the patient's medical records demonstrate **BOTH** of the following:
 - Treatment to be delivered consists of 5 fractions or less; ₃A boost is to be given as part of this requested treatment course using HDR_{.2, 3, 4}



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Radiation Therapy Utilizing IMRT for the Gastrointestinal System

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the gastrointestinal (GI) system may be appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5272 Radiation therapy utilizing IMRT for esophageal cancer may be reasonable and appropriate when the patient's medical records demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; Treatment to be delivered consists of 28 fractions or less 1, 11 and the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ALL of the following:
 - S A 3D plan has been performed and compared to the IMRT plan and when compared to a non-IMRT technique; 1,2, 3, 10
 - IMRT would substantially decrease normal tissue toxicity and patient has received radiation treatment to this site or an adjacent site; 3
 - When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and patient has received radiation treatment to this site or an adjacent site; and EITHER of the following:
 - S The IMRT plan results in reduction of radiation volume to the spinal cord of at least 10% and the 3D plan would result in delivery to the spinal cord of a 50Gy point dose; 3, 10, 11



- S There is a reduction of the V20 of at least 15% with the IMRT plan over the 3D plan. 3, 10, 11
- Treatment to be delivered consists of 28 fractions or less the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and BOTH of the following
 - When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and patient has received radiation treatment to this site or an adjacent site; 3, 11
 - Patient has received radiation treatment to this site or an adjacent site. 3, 11
- Ind. 5292 Radiation therapy utilizing IMRT for gastric cancer may be reasonable and appropriate when the patient's medical records demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; Treatment to be delivered consists of 30 fractions or less and 12, 13 the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 13; and **BOTH** of the following:
 - § A 3D plan has been performed and compared to the IMRT plan; 3, 4
 - S When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and patient has received radiation treatment to this site or an adjacent site; and EITHER of the following: 3, 4
 - S The IMRT plan results in reduction of radiation volume to the spinal cord of at least 10% and the 3D plan would result in delivery to the spinal cord of a 50Gy point dose; 3,4
 - There is a reduction of the V20 of at least 15% with the IMRT plan over the 3D plan; 3, 4, 13



- Treatment to be delivered consists of 30fractions or less 12, 13 and the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80)13; and BOTH of the following:
 - When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and patient has received radiation treatment to this site or an adjacent site; 4
 - **§** Patient has received radiation treatment to this site or an adjacent site. ³
- Ind. 5287 Radiation therapy utilizing IMRT for rectal cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less to a previous radiation site or an adjacent site for palliative care, Treatment to be delivered consists of 30 fractions or less 5, 14 and the patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY of the following:
 - **§** This is definitive treatment;
 - S This is post-operative treatment; 14
 - A 3D plan been performed and compared to the IMRT plan; 3, 5, 14
 - S The IMRT plan results in reduction of radiation volume to the small bowel of at least 20%.3, 14
- Ind. 5257 Radiation therapy utilizing IMRT for anal cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.
 ⁶Treatment to be delivered consists of 30 fractions or less ¹⁵ and the patient



has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and **BOTH** of the following:

- A 3D plan has been performed and compared to the IMRT plan; 15
- When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity 6 and patient has received radiation treatment to this site or an adjacent site; and EITHER of the following:
 - The IMRT plan results in reduction of radiation volume to the small bowel of at least 20%; _{3, 15}Patient is high risk and has received radiation treatment to this site or an adjacent site.

Ind. 5277 Radiation therapy utilizing IMRT for liver cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:

- Treatment to be delivered consists of 10 fractions or less for palliative care;⁷Treatment to be delivered consists of 30 fractions or less ⁷ and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and ANY of the following:
 - **§** The patient is high risk;
 - 3D plan has been performed and compared to the IMRT plan and the IMRT plan results in reduction of the small bowel by at least 20%; 3
 - **§** Patient has received radiation treatment to this site or an adjacent site. ³
- Ind. 5282 Radiation therapy utilizing IMRT for pancreatic cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;Treatment to be delivered consists of 30 fractions or less and when



compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and **ANY** of the following:

- **§** The patient is high risk;
- § 3D plan has been performed and compared to the IMRT plan and the IMRT plan results in reduction of the small bowel by at least 20%; 3
- **§** Patient has received radiation treatment to this site or an adjacent site. ³
- Ind. 5262 Radiation therapy utilizing IMRT for biliary tree cancer (gallbladder or Klatskin's tumor) cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; Treatment to be delivered consists of 30 fractionor less ₈ and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and ANY of the following:
 - **§** The patient is high risk;
 - 3D plan has been performed and compared to the IMRT plan and the IMRT plan results in reduction of the small bowel by at least 20%; 3,8
 - **§** Patient has received radiation treatment to this site or an adjacent site. ³
- Ind. 5267 Radiation therapy utilizing IMRT for colon cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; Treatment to be delivered consists of 30 fractions or less 9 and when compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity and ANY of the following:
 - **§** The patient is high risk;


- 3D plan has been performed and compared to the IMRT plan and the IMRT plan results in reduction of the small bowel by at least 20%; 9
- Patient has received radiation treatment to this site or an adjacent site. 3



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Radiation Therapy Utilizing SBRT for the Gastrointestinal System

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for the gastrointestinal (GI) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5274 Radiation therapy utilizing SBRT for esophageal cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and ALL of the following:
 - **§** Patient is being treated for an isolated recurrence
 - S This is for definitive/curative therapy.

Ind. 5294Radiation therapy utilizing SBRT for gastric cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:

 The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS



Grade of greater than or equal to eighty (80) and Motion management will be used; and ALL of the following:

- S Patient is being treated for an isolated recurrence;
- S This is for definitive/curative therapy.
- Ind. 5289 Radiation therapy utilizing SBRT for rectal cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - The patient has four (4) or more lesions being treated; 5Treatment to be delivered consists of 5 fractions or less 1, 5 to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; 5 and ALL of the following:
 - § Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy.
- Ind. 5259 Radiation therapy utilizing SBRT for anal cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and ALL of the following:
 - **§** Patient is being treated for an isolated recurrence;
 - S This is for definitive/curative therapy.



- Ind. 5279 Radiation therapy utilizing SBRT for liver cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated;₂Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient _{2, 3, 6} with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) ₃and Motion management will be used; and EITHER of the following:
 - S Patient is being treated for an isolated recurrence; 6
 - This is for definitive/curative therapy.
- Ind. 5284 Radiation therapy utilizing SBRT for pancreatic cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - The patient has four (4) or more lesions being treated; Treatment to be delivered consists of 5 fractions or less 3 to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management 3 will be used; and EITHER of the following:
 - S Patient is being treated for an isolated recurrence; 3
 - **§** This is for definitive/curative therapy.

Ind. 5264 Radiation therapy utilizing SBRT for biliary cancer (gallbladder or Klatskin's tumor) cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:

- The patient has four (4) or more lesions being treated;
- Treatment to be delivered consists of 5 fractions or less ₂ to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative



Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and **EITHER** of the following:

- § Patient is being treated for an isolated recurrence;
- This is for definitive/curative therapy.
- Ind. 5269 Radiation therapy utilizing SBRT for colon cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - The patient has four (4) or more lesions being treated; 5Treatment to be delivered consists of 5 fractions or less to treat three (3) lesions or less in an area of 3 cm or less for patient with Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and Motion management will be used; and EITHER of the following: 5
 - **§** Patient is being treated for an isolated recurrence; ₄
 - **§** This is for definitive/curative therapy.



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Radiation Therapy Utilizing 2D-3D for Genitourinary System

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the genitourinary (GU) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5300 Radiation therapy utilizing 2D-3D for low-risk or early stage prostate cancer (Gleason score of less than or equal to 6, andPSA less than 10) _{3,4,5} may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care₁Treatment to be delivered consists of 11-28 fractions _{3,4} to patient who is 69 years of age or younger.
- Ind. 5301 Radiation therapy utilizing 2D-3D for prostate cancer (intermediate/high-risk, Gleason score of greater than or equal to 7 and/or PSA greater than 10) _{3, 4, 5, 10}may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.
 1Treatment to be delivered consists of 40 fractions or less 3,4; and EITHER of the following:



- Section Patient is 75 years of age or younger;
- S Patient is 76 years of age or older with a life expectancy of greater than 6 months.

Ind. 5302 Radiation therapy utilizing 2D-3D for prostate cancer (metastatic) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:

- Treatment to be delivered consists of 10 fractions or less; and **ANY** of the following:
 - **§** Patient is being treated under palliative care; 1,3, 10
 - Metastatic disease to the spine;
 - Metastatic disease to the lung;
 - Metastatic disease to the brain;
 - **§** Metastatic disease to the bone (outside of spine); 10
- Treatment to be delivered consists of 11-15 fractions for metastatic disease to the spine.
- Ind. 5303 Radiation therapy utilizing 2D-3D for prostate cancer, post prostatectomy may be reasonable and appropriate _{8, 10} when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.
 1Treatment to be delivered consists of 36 fractions or less 1; and EITHER of the following:
 - § Patient is 75 years of age or younger;
 - Patient is 76 years of age or older with a life expectancy greater than 6 months;
 - Treatment to be delivered consists of 36 fractions or less ₁; and **BOTH** of the following:



- Patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
- **§** Patient has a life expectancy greater than 6 months.
- Ind. 5295 Radiation therapy utilizing 2D-3D for bladder cancer (any stage) may be reasonable and appropriate _{6, 13} when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care. 3, 11, 13 Treatment to be delivered consists of 30 fractions or less 13 for definitive therapy in a patient who is 75 years of age or younger;15 Treatment to be delivered consists of 25 fractions or less preoperatively. 15
- Ind. 5320 Radiation therapy utilizing 2D-3D for kidney cancer (any stage) may be reasonable and appropriate 7 when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care. 3, 15, 16 Treatment to be delivered consists of 30 fractions or less for definitive therapy in a patient who is 75 years of age or younger; Treatment to be delivered consists of 25 fractions or less preoperatively.
- Ind. 5325 Radiation therapy utilizing 2D-3D for testicular cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.
 2,3Treatment to be delivered consists of 20 fractions or less 9 following orchiectomy; and ANY of the following:
 - **§** Patient has Stage TI disease or greater; 2, 12



- S Patient has rete testes involvement; 12
- **§** Patient has involvement of the spermatic cord.



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Radiation Therapy Utilizing Brachytherapy for the Genitourinary System

Radiation therapy utilizing Brachytherapy for the genitourinary (GU) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5304 Radiation therapy utilizing Brachytherapy for prostate cancer (low risk/early stage: Gleason score of less than or equal to 6, and PSA less than 10) _{2, 3, 4, 5}may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered will consist of one (1) fraction with a life expectancy of greater than six (6) months, and an ECOG PS of 0-1 or a KPS of 80 or more, and **ANY** of the following:
 - Patient is high risk for recurrence, HDR is being used, along with a boost 3.
 - S This request is for monotherapy, with permanent seeds 2, 3 in a patient who is 75 yearsold or younger;

Patient is 75 years of age or younger, HDR is being used, and the request is for monotherapy.Ind. 5305 Radiation therapy utilizing Brachytherapy for Prostate cancer (intermediate/high risk, Gleason score of greater than or equal to 7 and/or PSA greater than 10) _{2,3} may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:



- Treatment to be delivered will consists of one (1) fraction or less with a boost and use of HDR _{2,5}, in a patient with a life expectancy of greater than 6 monthsand an ECOG PS of 0-1 or a KPS of 80 or more; and EITHER of the following:
 - S Patient is high risk for recurrence 1, 2;
 - S The patient is 75 years old or younger;



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Radiation Therapy Utilizing IMRT for the Genitourinary System

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the genitourinary (GU) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5308 Radiation therapy utilizing IMRT for low-risk or early stage prostate cancer (Gleason score of less than or equal to 6, and PSA less than 10) for a patient who has a life expectancy of greater than 6 months, may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 28 fractions ₃ or less to patient who 69 years of age or younger; and **ANY** of the following:
 - S An assessment of the patient's life expectancy is classified as "healthy" 3(please see SIOG guidelines);
 - S An assessment of the patient's life expectancy is classified as "vulnerable with a reversible problem" 3(please see SIOG guidelines);
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY one of the following:
 - The IMRT plan reduces small bowel toxicity by greater than 20%;
 - The IMRT plan reduces rectal toxicity by greater than 20% 5;
 - The IMRT plan reduces bladder toxicity by greater than 20% 5.

Ind. 5309 Radiation therapy utilizing IMRT for prostate cancer (intermediate or high risk, Gleason score of \geq 7 and/or PSA >10) for a patient who has a life expectancy of



greater than 6 months, may be reasonable and appropriate when the patient's medical record demonstrates the following:

- Treatment to be delivered consists of 45 fractions or less _{3,4}; and **ANY** of the following:
 - S Per International Society of Geriatric Oncology (SIOG) guidelines the patient is classified as healthy 3; and ANY of the following:
 - The IMRT plan reduces small bowel toxicity by greater than 20%, 4;
 - The IMRT plan reduces rectal toxicity by greater than 20% 4, 5;
 - The IMRT plan reduces bladder toxicity by greater than 20% 4, 5;
 - Per International Society of Geriatric Oncology (SIOG) guidelines the patient is classified as "vulnerable" 3 with a reversible problem; and ANY of the following:
 - The IMRT plan reduces small bowel toxicity by greater than 20% 4;
 - The IMRT plan reduces rectal toxicity by greater than 20% 4, 5;
 - The IMRT plan reduces bladder toxicity by greater than 20%4;
 - Patient is 75 years of age or younger with a high risk for recurrence, an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) with a live expectancy of six (6) months or greater; and ANY of the following 1:
 - The IMRT plan reduces small bowel toxicity by greater than 20% 4;
 - The IMRT plan reduces rectal toxicity by greater than 20% 4, 5;
 - The IMRT plan reduces bladder toxicity by greater than 20%_{4,5}.
- Ind. 5310 Radiation therapy utilizing IMRT for prostate cancer (metastatic cancer) may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:



- Treatment to be delivered consists of 10 fractions or less; and EITHER of the following:
 - S Patient is being treated under palliative care 6, 7, 8;
 - **§** Patient is being treated for brain metastasis ₆;
- Treatment to be delivered consists of 10 fractions or less_{6,7} for a patient who is 75 years of age or younger₆ with a high risk for recurrence, has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) with a live expectancy of six (6) months or greater; and ANY of the following:
 - S Patient is being treated for metastasis to the spine, 7,8;
 - S Patient is being treated for metastasis to the lung and IMRT plan willreduce lung toxicity by greater than 20%;
 - Patient is being treated for metastasis to the bone (other than spine) 1, 6, 8 7;
 - § .
- Treatment to be delivered consists of 11-15 fractions_{6,7}; and **ALL** of the following
 - Patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - Search Patient is 75 years of age or younger_{6,7};
 - Section 2 Patient's life expectancy is 6 months or greater;
 - Sector Patient is being treated for metastasis in the spine 6, 7, 8.
- Ind. 5311 Radiation therapy utilizing IMRT for prostate cancer (post prostatectomy) ₃ may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Treatment to be delivered consists of 36 fractions or less;

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- Patient is 75 years of age or younger; Patient's Eastern Cooperative
 Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); Patient's life expectancy is 6 months or greater; and EITHER of the following 3:
 - S Per International Society of Geriatric Oncology (SIOG) guidelines the patient is classified as healthy 3; and ANY one of the following:
 - PSA has remained detectable a minimum of 6 months after surgery 3;
 - PSA remained detectable post operatively AND increased on 2 or more labs;
 - The final pathology of the specimen Stage T3b or T4;
 - There were positive margins on the post-operative pathology 3.
 - Per International Society of Geriatric Oncology (SIOG) guidelines the patient is classified as vulnerable, with a reversible problem 3; and ANY one of the following:
 - PSA has remained detectable a minimum of 6 months after surgery 3;
 - PSA remained detectable post operatively AND increased on 2 or more labs;
 - The final pathology of the specimen Stage T3b or T4 3;
 - There were positive margins on the post-operative pathology 3.
- Patient is 75 years of age or younger; and **ALL** of the following:
 - Patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - **§** Patient is high risk for recurrence ₃;
 - S Patient's life expectancy is 6 months or greater 3, and EITHER of the following:
 - IMRT plan reduces small bowel toxicity by greater than 20% 5;

IMRT plan reduces rectal toxicity by greater than 20% 5;



IMRT plan reduces bladder toxicity by greater than 20% ₅. Ind. 5297 Radiation therapy utilizing IMRT for bladder cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates the following:

- Treatment to be delivered consists of 30 fractions or less; has a life expectancy of six (6) months or greater and **EITHER** of the following:
 - **§** Patient is high risk for recurrence;
 - S The treatment plan is for definitive treatment (no planned surgery); and ANY of the following:
 - IMRT plan reduces bladder toxicity by greater than 20% 9;
 - IMRT plan reduces small bowel toxicity by greater than 20% 9 and patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - IMRT plan reduces rectal toxicity by greater than 20% 9; and patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).
- Treatment to be delivered consists of 25 fractions or less; and **BOTH** of the following:
 - S Age is 75 years or younger 9;
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY of the following:
 - IMRT plan reduces rectal toxicity by greater than 20% 9;
 - IMRT plan reduces bladder toxicity by greater than 20% 9;
 - Another radiation modality will be used during the course of this treatment.



- Ind. 5322 Radiation therapy utilizing IMRT for kidney cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consist of 30 fractions or less; and ALL of the following:
 - **§** Patient's life expectancy is 6 months or greater;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - S This is for definitive therapy (no planned surgery); and ANY of the following:
 - IMRT plan reduces small bowel toxicity by greater than 20%; 3
 - IMRT plan reduces rectal toxicity by greater than 20%; 3
 - IMRT plan reduces bladder toxicity by greater than 20%.3
 - Treatment to be delivered consists of 30 fractions or less the patient is high risk with a life expectancy of greater than 6 months. Treatment to be delivered consists of 25 fractions or less for a patient who is 75 years of age or less and ANY of the following:
 - Another radiation modality will be utilized during the course of thistreatment;
 - IMRT plan reduces bladder toxicity by greater than 20%; 3
 - IMRT plan reduces rectal toxicity by greater than 20%.3
- Ind. 5327 Radiation therapy utilizing IMRT for testicular cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 20 fractions or less, post orchiectomy _{2, 10}; and **EITHER** of the following:



- § IMRT plan reduces small bowel toxicity by greater than 20% 10; and ANY of the following:
 - Patient has TI disease or greater 2;
 - Patient has extracapsular extension (ECE);
 - Patient has improvement of the spermatic cord.
- § IMRT plan results in greater than a 20% reduction in kidney toxicity; and ANY of the following, 10:
 - Patient has TI disease or greater₂;
 - Patient has ECE;
 - Patient has improvement of the spermatic cord.



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- 2. NCCN Clinical Practice Guidelines in Oncology: Testicular Cancer V1.2019, National Comprehensive Cancer Network., https://www.nccn.org/professionals/physician_gls/pdf/testicular.pdf
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Radiation Therapy Utilizing SBRT for the Genitourinary System

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for the genitourinary (GU) system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5316 Radiation therapy utilizing SBRT for prostate cancer (early stage, Gleason less than or equal to 6 and PSA less than 10) may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 5 fractions or less _{2, 3, 4, 5} and **BOTH** of the following:
 - § Motion management will be utilized;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and EITHER of the following:
 - This is for definitive therapy 2;
 - Patient has received radiation therapy to this location previously and is being treated for an isolated local recurrence ₃.
- Ind. 5317 Radiation therapy utilizing SBRT for prostate cancer (Intermediate or high risk with Gleason score of greater than or equal to 7 and/ or PSA greater than 10) may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Treatment to be delivered consists of 5 fractions or less 2, 3, 4, 5; Motion management will be utilized; Gleason score of 7 4, 5; PSA of less than 20 4, 5;



Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and **EITHER** of the following:

- **§** This is for definitive therapy ₂;
- Patient has received radiation therapy to this location previously and is being treated for an isolated local recurrence 3.
- Ind. 5318 Radiation therapy utilizing SBRT for prostate cancer (metastatic) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions or less_{6,7}; and ALL of the following:
 - S This is for definitive/curative therapy ₆;
 - S Motion management will be utilized 7;
 - S The patient has three (3) lesions or less that are being treated 7;
 - § The area being treated is 3 cm or less;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 6,7;
 - **§** Patient is being treated for an isolated recurrence.
 - The patient has four (4) lesions or more that are being treated. 6
- Ind. 5324 Radiation therapy utilizing SBRT for kidney cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 5 fractions or less _{8, 9, 10}; and ALL of the following:
 - **§** The patient has three (3) lesions or less that are being treated 10;



- 5 The area being treated is 3 cm or less₁₀;
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80), and EITHER of the following₁₀Patient is being treated for an isolated recurrence 1.
 - S This is for definitive/curative therapy; 8, 10
- The patient has four (4) lesions or more that are being treated.



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Radiation Therapy Utilizing 2D-3D for the Gynecological System

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the gynecological system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5185 Radiation therapy utilizing 2D-3D for cervical cancer (any stage) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care 2, 7;
 - Treatment to be delivered consists of 30 fractions or less _{1,7}; and **ANY** of the following:
 - **§** Patient will receive IMRT as part of this treatment course 1;
 - Patient will also receive Brachytherapy as part of this treatment course 1, 7;
 - S This is for definitive treatment 1, 2, 7;
 - S This is for postoperative treatment 1.
- Ind. 5190 Radiation therapy utilizing 2D-3D for cancer of the endometrium (any stage) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates EITHER of the following:



- Treatment to be delivered consists of 10 fractions or less for palliative care 2;
- Treatment to be delivered consists of 30 fractions or less _{3, 8}; and **ANY** of the following:
 - S Patient will also receive Brachytherapy as part of this treatment course; 3,
 - S This is for definitive treatment_{2,6};
 - S This is for postoperative treatment. 3, 8
- Ind. 5195 Radiation therapy utilizing 2D-3D for ovarian cancer may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; 4, 4Treatment to be delivered consists of 30 fractions or less; and ANY of the following:
 - **§** Patient will also receive Brachytherapy as part of this treatment course;
 - S This is for definitive treatment 4;
 - S This is for postoperative treatment 4, 9.
 - **§** Patient will also receive IMRT therapy as part of this treatment course.
- Ind. 5200 Radiation therapy utilizing 2D-3D for cancer of the vagina or vulva (any stage) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care; $_{2,5}$ Treatment to be delivered consists of 30 fractions or less $_{5}$; and **ANY** of the following:



- Patient will also receive Brachytherapy as part of this treatment course 5,
 6;
- **§** This is for definitive treatment₂;
- S This is for postoperative treatment 5.
- S Patient will also receive IMRT therapy as part of this treatment course. 5



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Radiation Therapy Utilizing Brachytherapy for the Gynecological System

Delivery of radiation therapy utilizing Brachytherapy for the gynecological system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5189 Radiation therapy utilizing Brachytherapy for cervical cancer (any stage) ₃ may be reasonable and appropriate when the patient's medical record demonstrates ALL of the following:
 - Treatment to be delivered consists of 5 fractions or less_{1,7}; Brachytherapy will be given as a boost following pelvic radiation_{1,7}; Patient has received external beam radiation therapy within the last 6 months; and **ANY** of the following:
 - **§** The implant is interstitial 1;
 - S The implant is tandem and ring 1;
 - S The implant is tandem and ovoid₁.
- Ind. 5194 Radiation therapy utilizing Brachytherapy for endometrial cancer (any stage) ₃may be reasonable and appropriate when the patient's medical record demonstrates ANY of the following:



- Treatment to be delivered consists of 3 fractions or less and Brachytherapy will be given as definitive therapy 4,6;
- Treatment to be delivered consists of 3 fractions or less 4, 6; and BOTH of the following:Brachytherapy will be given as a boost following pelvic radiation 4, 5, 6; AND
- Patient has received external beam radiation therapy within the last 6 months; and **ANY** of the following:
 - S Patient has Stage IB disease and is high risk 5, 6; Patient has Stage II disease 5;
 - Section Patient has Stage III disease 5.
- Ind. 5204 Radiation therapy utilizing Brachytherapy for cancer of the Vagina or Vulva (any stage) ₃ may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Treatment to be delivered consists of 5 fractions or less_{4,8}; Brachytherapy will be given as a boost following pelvic radiation _{2,5,8}; Patient has received external beam radiation therapy within the last 6 months; and **ANY** of the following:
 - **§** The implant is interstitial and the patient is high risk;
 - S The implant is tandem and ring;
 - **§** The implant is tandem and ovoid.



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Radiation Therapy Utilizing IMRT for the Gynecological System

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the gynecological system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5186 Radiation therapy utilizing IMRT for cervical cancer (any stage) may be reasonable and appropriate 5 when the patient's medical records demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less to a previous radiated site or an adjacent site for palliative care. ⁹Treatment to be delivered consists of 30 fractions or less 4, 6, 8; and BOTH of the following:
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity 4, 6, 8; and EITHER of the following:
 - Patient is high risk;
 - A 3D plan has been performed and compared to the IMRT plan _{4,6,8}; and **ANY** of the following:
 - IMRT shows a reduction of the small bowel volume of greaterthan
 20% when compared to the 3D plan 4, 6, 8;
 - Para-aortic nodes are being included in this treatment volume 4,

8;



- § IMRT results in reduction of the mean dose to either kidney by at least 20% 4,8.
- Patient to receive Brachytherapy as part of this treatment course 4.
- Ind. 5191 Radiation therapy utilizing IMRT for endometrial cancer (any stage) may be reasonable and appropriate 5 when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less to a previous radiated site or an adjacent site for palliative care. ⁹Treatment to be delivered consists of 30 fractions or less_{1, 2, 6, 8} and BOTH of the following:
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - **§** When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity _{2, 6, 8}; and **EITHER** of the following:
 - Patient is high risk 2,8;
 - A 3D plan has been performed and compared to the IMRT plan; and ANY of the following 2, 6, 8:
 - IMRT shows a reduction of the small bowel volume of greater than 20% when compared to the 3D plan 2, 6, 8;
 - S Para-aortic nodes are being included in this treatment volume 2,8;
 - § IMRT results in reduction of the mean dose to either kidney by at least 20%. 8
- Ind. 5196 Radiation therapy utilizing IMRT for ovarian cancer (any stage) may be reasonable and appropriate 5 when the patient's medical records demonstrates **ANY** of the following:



- Treatment to be delivered consists of 10 fractions or less to a previous radiated site or an adjacent site for palliative care. ⁹Treatment to be delivered consists of 30 fractions or less 6,8; and BOTH of the following:
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity; and EITHER of the following 6, 8:
 - Patient is high risk;
 - A 3D plan has been performed and compared to the IMRT plan 6, 8; and ANY of the following:
 - IMRT shows a reduction of the small bowel volume of greater than 20% when compared to the 3D plan 6,8;
 - S Para-aortic nodes are being included in this treatment volume ₈;
 - S IMRT results in reduction of the mean dose to either kidney by at least 20% 8.
- Patient to receive Brachytherapy as part of this treatment course.
- Ind. 5201 Radiation therapy utilizing IMRT for cancer of the vagina or vulva (any stage) may be reasonable and appropriate ₅ when the patient's medical record demonstrates ANY of the following:
 - Treatment to be delivered consists of 10 fractions or less to a previous radiated site or an adjacent site for palliative care. 9
 - Treatment to be delivered consists of 30 fractions or less _{3, 6, 7, 8}; and **BOTH** of the following:
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);



- **§** When compared to a non-IMRT technique, IMRT would substantially decrease normal tissue toxicity _{3, 6, 7, 8}; and **EITHER** of the following:
 - Patient is high risk;
 - A 3D plan has been performed and compared to the IMRT plan 3, 6, 7, 8
 ; and ANY of the following:
 - IMRT shows a reduction of the small bowel volume of greater than 20% when compared to the 3D plan 3, 6, 7, 8;
 - S Para-aortic nodes are being included in this treatment volume 8;
 - § IMRT results in reduction of the mean dose to either kidney by at least 20% 8.



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Radiation Therapy Utilizing SBRT for the Gynecological System

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for the gynecological system may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5188 Radiation therapy utilizing SBRT for cervical cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions 1, 3, 4, 5, 6, 7 or less; and ALL of the following:
 - **§** This is for definitive/curative therapy ₇;
 - S Motion management will be utilized 4, 5;
 - S The patient has three (3) lesions or less that are being treated 4, 6, 7;
 - S The area being treated is 3 cm or less;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4,6; and EITHER
 - Patient is being treated for an isolated local recurrence 1,7,
 - Patient has received radiation therapy to this location previously 2, 3, 6,
 - The patient has four (4) lesions or more that are being treated.
- Ind. 5193 Radiation therapy utilizing SBRT for endometrial cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:



- Treatment to be delivered consists of 5 fractions or less _{3, 4, 5, 6}; and ALL of the following:
 - S This is for definitive/curative therapy;
 - **§** Motion management will be utilized 4, 5;
 - 5 The patient has three (3) lesions or less that are being treated 4, 6;
 - S The area being treated is 3 cm or less;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4,6;
 - **§** Patient is being treated for an isolated local recurrence.
- The patient has four (4) lesions or more that are being treated.
- Ind. 5198 Radiation therapy utilizing SBRT for ovarian cancer (any stage) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions or less 3, 4, 5, 6, 8; and ALL of the following:
 - S This is for definitive/curative therapy;8
 - S Motion management will be utilized 4, 5;
 - S The patient has three (3) lesions or less that are being treated 4, 6,8;
 - S The area being treated is 3 cm or less; 8
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4,6; and EITHER of the following:
 - Patient is being treated for an isolated local recurrence.
 - Patient has received radiation therapy to this location previously, 3,6
 - The patient has four (4) lesions or more that are being treated.8



- Ind. 5203 Radiation therapy utilizing SBRT for cancer of the vagina or vulva (any stage) may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 5 fractions or less _{3, 4, 5,, 6}; and ALL of the following:
 - S This is for definitive/curative therapy;
 - Motion management will be utilized 4, 5;
 - S The patient has three (3) lesions or less that are being treated 4, 6;
 - § The area being treated is 3 cm or less;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4, 6; and EITHER of the following:
 - Patient is being treated for an isolated recurrence.
 - Patient has received radiation therapy to this location previously 2, 3, 6
 - The patient has four (4) lesions or more that are being treated.



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Radiation Therapy Utilizing 2D-3D for Hematologic Cancer

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for hematologic cancer may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5205 Radiation therapy utilizing 2D-3D for multiple myeloma or Plasmacytoma cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less 1, 5, 7; and ANY of the following:
 - S Patient is being treated under palliative care 1, 5, 8;
 - S This is for total body irradiation (TBI) 7;
 - S The requested XRT is for consolidation after a bone marrow transplant;
 - § Multiple Myeloma treatment is to a single site;
 - Treatment to be delivered consists of 35 fractions or less for solitary Plasmacytoma. 4, 7
- Ind. 5210 Radiation therapy utilizing 2D-3D for Leukemia may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less 16 for EITHER of the following:



- S Patient is being treated for palliative care. This is for total body irradiation. 13, 16
- Treatment to be delivered consists of 25 fractions or less _{6, 13}; and **ANY** of the following:
 - S The requested XRT is for consolidation after a bone marrow transplant; 13
 - Site requested is a lymph node region;
 - S The site treated is the eye 6, 12, the stomach or the mediastinum;
 - **§** This is for a cutaneous lymphoma. 14
- Ind. 5215 Radiation therapy utilizing 2D-3D for Hodgkin's lymphoma may be reasonable and appropriate ₂ when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less _{2, 10}; and **EITHER** of the following:
 - S Patient is being treated under palliative care 2, 10;
 - S This is for TBI.
 - Treatment to be delivered consists of 25 fractions or less _{2, 3, 8}; and **ANY** of the following:
 - **§** The requested XRT is for consolidation after a bone marrow transplant;
 - Site requested is a lymph node region ₈;
 - S The site treated is the eye 12, the stomach or the mediastinum;
 - S This is for a cutaneous lymphoma 2, 9.
- Ind. 5220 Radiation therapy utilizing 2D-3D for non-Hodgkin's lymphoma may be reasonable and appropriate ₂ when the patient's medical record demonstrates **EITHER** of the following:



- Treatment to be delivered consists of 10 fractions or less; and **EITHER** of the following:
 - S Patient is being treated under palliative care;
 - S This is for TBI.
- Treatment to be delivered consists of 25 fractions or less _{3, 11, 15}; and **ANY** of the following:
 - **§** The requested XRT is for consolidation after a bone marrow transplant₁₅;
 - Site requested is a lymph node region 11;
 - **§** The site treated is the eye, the stomach or the mediastinum;
 - S This is for a cutaneous lymphoma 9.



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Radiation Therapy Utilizing IMRT for Hematologic Cancer

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) or Proton for hematologic cancer may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80)

- Ind. 5216 Radiation therapy utilizing IMRT for Hodgkin's lymphoma may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 25 fractions or less 1, 2, 3, 5; and ANY of the following:
 - **§** Request is for treatment of the eye;
 - § IMRT will reduce the V20 to the lungs by greater than 20% and request is for treatment of the mediastinum 1, 2,3, 5;
 - IMRT will reduce the dose to the spinal cord by at least 20% 1,3,5;
 - **§** IMRT will reduce the dose to the kidneys by at least 20% 1.;
 - IMRT will reduce the dose to the liver by at least 20%;
 - IMRT will reduce the dose to the heart by at least 20% 1,2,3,5;
 - S Request is for treatment of the mediastinum 1, 2, 3, 6
- Ind. 5221 Radiation therapy utilizing IMRT for non-Hodgkin's lymphoma (NHL) may be reasonable and appropriate when the patient's medical record demonstrates the following:



- Treatment to be delivered consists of 25 fractions or less 4; and ANY of the following:
 - S Request is for treatment of the eye;
 - § IMRT will reduce the V20 to the lungs by greater than 20% and request is for treatment of the mediastinum;
 - **§** IMRT will reduce the dose to the spinal cord by at least 20%;
 - IMRT will reduce the dose to the kidneys by at least 20%;
 - S IMRT will reduce the dose to the liver by at least 20%;
 - IMRT will reduce the dose to the heart by at least 20% 4;
 - **§** Request is for treatment of the mediastinum 4,6



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Radiation Therapy Utilizing SBRT for Hematologic Cancer

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for lymphatic cancer may be medically appropriate and supported by evidence to improve patient outcomes for the following indications...

- Ind. 5223 Radiation therapy utilizing SBRT for non-Hodgkin's lymphoma (NHL), in any stage and in any location, may be reasonable and appropriate when the patient's medical records demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions or less₁; and ALL of the following
 - § This is for definitive/curative therapy for an isolated, local recurrence;
 - **§** Motion management will be utilized ₁;
 - 5 The patient has three (3) lesions or less that are being treated;
 - S The area being treated is 3 cm or less;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and EITHER of the following:
 - Patient is being treated for disease in the head and neck;
 - Patient is being treated for disease in the lung;
 - The patient has four (4) lesions or more that are being treated.



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Radiation Therapy Utilizing 2D-3D for the Central Nervous System

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for the central nervous system (CNS) may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5115 Radiation therapy utilizing 2D-3D for the treatment of a benign brain tumor (meningioma, acoustic neuroma, pituitary adenoma, craniopharyngioma, schwannoma, or chordoma) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less; and ALL of the following:
 - § Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - § Patient is 69 years of age or younger;
 - § Patient is being treated under palliative care.
 - Treatment to be delivered consists of 30 fractions or less ₂; and **BOTH** of the following:
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - **§** Patient is 69 years of age or younger; and **ANY** of the following:
 - The tumor is inoperable;
 - Patient is not a good surgical candidate;



• The tumor is causing symptoms in the patient; Patient is 18 years of age or younger

Ind. 5116 Radiation therapy utilizing 2D-3D for the treatment of low-grade glioma (astrocytoma, ganglioglioma, oligodengroglioma's, pilocytic tumor, medulloblastoma, and JPA) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:

- Treatment to be delivered consists of 10 fractions or less; and ALL of the following:
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 3;
 - **§** Patient is being treated under palliative care.
- Treatment to be delivered consists of 30 fractions or less _{2,3}; the Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80)₃; and ANY of the following:
 - S The tumor is inoperable; Patient is not a good surgical candidate; The tumor is causing symptoms in the patient; Patient is 18 years of age or younger.
- Ind. 5118 Radiation therapy utilizing 2D-3D for a high-grade glioma (glioblastoma multiforme, anaplastic astrocytoma, or brainstem glioma) may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less; and the Patient is being treated under palliative care.

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- Treatment to be delivered consists of 21-33 fractions_{2,3}; and ANY of the following:
 - **§** Patient is 18 years of age or younger.
 - **§** Patient is 69 years of age or younger ₃; and **ANY** of the following:
 - The tumor is inoperable;
 - Patient is not a good surgical candidate;
 - The tumor is causing symptoms in the patient;
- Ind. 5119 Radiation therapy utilizing 2D-3D for brain metastasis from any primary site may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 10 fractions or less₂ for palliative care 1.
- Ind. 5117 Radiation therapy utilizing 2D-3D for a tumor located inside the eye 1 may be reasonable and appropriate when the patient's medical record demonstrates ANY of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care 4.
 - Treatment to be delivered consists of 30 fractions or less 4 for patient who is
 69 years of age or younger; and ANY of the following:
 - **§** The tumor is inoperable;
 - **§** Patient is not a good surgical candidate;
 - **§** The tumor is causing symptoms in the patient;
 - Treatment to be delivered consists of 30 fractions or less who is 18 years or younger



- 1. AIM Clinical Guidelines, Radiation Oncology. Effective date March 9, 2019
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Radiation Therapy Utilizing Brachytherapy for the Central Nervous System

Delivery of radiation therapy utilizing Brachytherapy for the central nervous system (CNS) may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5121 Radiation therapy utilizing Brachytherapy for a high-grade glioma (glioblastoma multiforme, anaplastic astrocytoma, or brainstem glioma) may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Brachytherapy is being requested. 2, 3
- Ind. 5123 Radiation therapy utilizing Brachytherapy for a tumor located inside the eye may be reasonable and appropriate when the patient's medical record demonstrates ALL of the following:
 - Patient is being treated for uveal/choroidal melanoma; 1An episcleral plaque being used.
 - Treatment to be delivered is 1 fraction



- 1. AIM Clinical Guidelines, Radiation Oncology. Effective date March 9, 2019
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Radiation Therapy Utilizing IMRT for the Central Nervous System

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for the central nervous system (CNS) may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5125 Radiation therapy utilizing IMRT for benign brain tumor (meningioma, acoustic neuroma, pituitary adenoma, craniopharyngioma, schwannoma, or chordoma) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions and EITHER of the following:
 - Patient has received radiation to a side that has previously been radiated₁ or an adjacent site for palliative care;
 - § Patient is high risk
 - Treatment to be delivered consists of 30 fractions or less ₂; and **ANY** of the following:
 - 5 The IMRT plan results in a reduction to the brainstem of at least 10%; 5,6
 - S The IMRT plan results in a reduction of the mean brain dose of at least 10%;5,6
 - **§** The IMRT plan results in a reduction to the cochlea of at least 10%;



- S The IMRT plan results in a reduction to the optic chiasm of at least 10%;5,
- **§** The patient received previous radiation to this location. 1
- Ind. 5127 Radiation therapy utilizing IMRT for low-grade glioma (astrocytoma, ganglioglioma, oligodengroglioma, pilocytic tumor, medulloblastoma, or JPA) may be reasonable and appropriate when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 1 and their medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions to a side that has previously been radiated or an adjacent site for palliative care.
 - Treatment to be delivered consists of 30 fractions or less ₂; and **ANY** of the following:
 - S The IMRT plan results in a reduction to the brainstem of at least 10%;5,6
 - S The IMRT plan results in a reduction of the mean brain dose of at least 10%;5,6
 - **§** The IMRT plan results in a reduction to the cochlea of at least 10%; ₆
 - S The IMRT plan results in a reduction to the optic chiasm of at least 10%;5,
 - S The patient received previous radiation to this location. 1
 - **§** Patient is high risk and tumor is less than 3 cm.
- Ind. 5126 Radiation therapy utilizing IMRT for high-grade glioma (glioblastoma multiforme, anaplastic astrocytoma, or brainstem glioma) may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.



- Treatment to be delivered consists of 11-20 fractions for inoperable tumor 10, patient has an Eastern Cooperative Oncology Group ECOG Performance Status Grade of greater than or equal to two (2) OR a KPS Grade of less than seventy (70) 1.
- Treatment to be delivered consists of 21-33 fractions_{2, 7, 8} for a patient who is 69 years of age or younger with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) ; 1 and ANY of the following:
 - § There was an image complete resection;
 - **§** The tumor is inoperable ₁₀;
 - **§** The patient is not a good surgical candidate.
- Ind. 5129 Radiation therapy utilizing IMRT for brain metastasis from any primary site may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 10 fractions or less 2,4, 9; and ALL of the following:
 - **§** Patient is being treated under palliative care; 9
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); 1,9
 - **§** Patient received previous radiation to this location. 1
 - Treatment to be delivered consists of 10 fractions or less 2,4,9; and ANY of the following:
 - 5 The IMRT plan results in a reduction to the brainstem of at least 10%;5,6
 - S The IMRT plan results in a reduction of the mean brain dose of at least 10%;5,6
 - 5 The IMRT plan results in a reduction to the cochlea of at least 10%; 6



- S The IMRT plan results in a reduction to the optic chiasm of at least 10%;5,
- Patient is high risk and there are four (4) or fewer metastatic brain lesions; 9
- **§** The patient has received radiation to this site previously. 1
- Ind. 5128 Radiation therapy utilizing IMRT for a tumor located inside the eye may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care.
 - Treatment to be delivered consists of 30 fractions or less with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY of the following:
 - 5 The IMRT plan results in a reduction to the brainstem of at least 10%;5,6
 - S The IMRT plan results in a reduction to the cochlea of at least 10%; 6
 - S The IMRT plan results in a reduction to the lens of at least 10%; 5,6
 - Treatment to be delivered consists of 30 fractions or less; and **BOTH** of the following:
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - **§** Patient is high risk; and **EITHER** of the following:
 - The IMRT plan results in a reduction of the mean brain dose of at least 10%;5,6
 - The IMRT plan results in a reduction to the optic chiasm of at least 10%.5,6



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Radiation Therapy Utilizing SBRT/SRS for the Central Nervous System

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) or SRS (Stereotactic Radiosurgery) for the central nervous system (CNS) may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5136 Radiation therapy utilizing SBRT for a benign brain tumor (meningioma, acoustic neuroma, pituitary adenoma, craniopharyngioma, schwannoma, or chordoma) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient is being treated under palliative care and the tumor is causing symptoms in the patient and the treatment to be delivered to the patient is 1 fraction_{1, 2, 10, 11};
 - Treatment to be delivered consists of 5 fractions or less_{2, 9, 11}; and **ANY** of the following:
 - S This is for definitive/curative therapy; 9, 11
 - S Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and the patient is being treated for an isolated local recurrence
 - **§** This is being requested as a boost for initial course of treatment ₁₁
 - **§** There is not active disease except for this area of local recurrence ₁₁;
 - **§** Patient has received radiation to this site previously. ₁



- Ind. 5138 Radiation therapy utilizing SBRT for a low-grade glioma (astrocytoma, ganglioglioma, oligodengroglioma, pilocytic tumor, medulloblastoma, or JPA) may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 1 fraction, 1, 9patient is being treated under palliative care and the tumor is causing symptoms in the patient, and Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);
 - Treatment to be delivered consists of 1 fraction and **EITHER** of the following:
 - This treatment is being requested as a boost for the initial treatment course
 - **§** There is no active disease except for the area of local recurrence
 - Treatment to be delivered consists of 1 fraction_{1,9}, Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); 1 and ANY of the following:
 - S This is for definitive/curative therapy; 9
 - S Treatment is for a recurrent tumor; 1
 - Section Patient is being treated for an isolated local recurrence; 9
- Patient has received radiation to this site previously; 1Ind. 5137 Radiation therapy utilizing SBRT for a high grade glioma (glioblastoma multiforme, anaplastic astrocytoma, or brainstem glioma) 3 may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 1 fraction ₉ for palliative care where the tumor is causing symptoms.₆Treatment to be delivered consists of 1 fraction, _{5, 6,9} and ANY of the following:



- S Patient has received radiation to this site previously; 1
- S This is for definitive/curative therapy; 12
- S There is no active disease except for this area of local recurrence 1,6;
- S This treatment is being requested as a boost for the initial course of treatment. 12
- Treatment to be delivered consists of 1 fractions_{1, 5, 9}, Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80);₁and EITHER of the following:
 - S The treatment is for a recurrent tumor 1, 5;
 - S This is treatment for an isolated local recurrence, 4,6.
- Ind. 5139 Radiation therapy utilizing SBRT for brain metastasis from any primary site may be reasonable and appropriate for a patient who has 4 brain metastases or less when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 1 fraction _{2,7,9} where the patient has four (4) metastatic lesions to the brain or less _{7,8,9}; and **EITHER** of the following:
 - S This is for definitive/curative therapy; 8
 - S Patient has received radiation to this site previously1,8
 - Treatment to be delivered consists of 1 fraction 2,9 where the patient has four (4) metastatic lesions to the brain or less 7, Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 1,7 and EITHER of the following:
 - S This is treatment for an isolated local recurrence;8
 - § The treatment is for a recurrent tumor 8



- Treatment to be delivered consists of 1 fraction for palliative care where the patient has four (4) metastatic lesions to the brain _{7,8} or less and tumor is causing symptoms.₉
- The patient has five (5) metastatic lesions to the brain or less;
- Treatment to be delivered consists of 1 fraction 7,9 and EITHER of the following:
 - S This is being requested as a boost for the initial course of treatment; 8,9
 - S There is no active disease except for this area of local recurrence 9

Ind. 5135 Radiation therapy utilizing SRS/SBRT for a tumor located inside the eye may be reasonable and appropriate for a patient who has four (4) brain metastases or less when the patient's medical record demonstrates the following:

- Treatment to be delivered consists of 5 fractions or less 13 where the patient has four (4) metastatic lesions to the brain or less; and EITHER of the following:
 - **§** This is for definitive/curative therapy;
 - **§** Patient has received radiation to this site previously ₁
- Treatment to be delivered consists of 5 fractions or less where the patient has four (4) metastatic lesions to the brain or less and the Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) EITHER of the following:
 - S This is treatment for an isolated local recurrence;
 - § The treatment is for a recurrent tumor
- Treatment to be delivered consists of 5 fractions or less where the patient has four (4) metastatic lesions to the brain or less, and the treatment is for palliative care where the tumor is causing symptoms.



- Ind. 5140 Radiation therapy utilizing SRS for trigeminal neuralgia or facial pain may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patients trigeminal neuralgia is intractable to pain medications; 3, 1
 - This is a repeat procedure; 4, 1
 - Surgery was attempted previously. 3



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Radiation Therapy Utilizing 2D-3D for Sarcoma

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for sarcoma may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5225 Radiation therapy utilizing 2D-3D for sarcoma that has originated in the head and neck region may be reasonable and appropriate ₂ when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;
 11
 - Treatment to be delivered consists of 35 fractions or less 1, 11; and EITHER of the following:
 - S Concurrent chemotherapy is being used; 11
 - S Patient is at a high risk for recurrence.11
- Ind. 5230 Radiation therapy utilizing 2D-3D for sarcoma that has originated from an extremity or a bone may be reasonable and appropriate _{2,15} when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) ₄ and their medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;



- Treatment to be delivered consists of 35 fractions or less 3, 4, 7, 8; and EITHER of the following:
 - S Concurrent chemotherapy is being used; 4,5
 - S Patient is at a high risk for recurrence. 3, 4, 5
- Ind. 5235 Radiation therapy utilizing 2D-3D for sarcoma that has originated from the abdominal cavity or thoracic cavity may be reasonable and appropriate ₂ when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates **ANY** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care;
 - Treatment to be delivered consists of 35 fractions or less 1, 3, 9, 16 ; and EITHER of the following:
 - S Concurrent chemotherapy is being used; 9, 16
 - S Patient is at a high risk for recurrence. 3, 9
- Ind. 5245 Radiation therapy utilizing 2D-3D for sarcoma that has metastasized to another part of the body may be reasonable and appropriate ₂ when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates that the treatment to be delivered consists of 5 fractions or less for palliative care. _{6, 10}
- Ind. 5250 Radiation therapy utilizing 2D-3D for a primary bone tumor may be reasonable and appropriate _{2,13} when the patient's Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) and their medical record demonstrates the following:



• Treatment to be delivered consists of 10 fractions or less for palliative care._{12, 14}



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Radiation Therapy Utilizing Brachytherapy for Sarcoma

Delivery of radiation therapy utilizing Brachytherapy for sarcoma may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5234 Radiation therapy utilizing Brachytherapy for sarcoma ₆ that has originated from an extremity or bone may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 8 fractions or less with a boost in a high risk patient. 1, 2
 - Treatment to be delivered consists of 8 or more fractions with a boost and 2D/3D delivered as part of this treatment for a high risk patient. 1, 3, 4, 5



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Radiation Therapy Utilizing IMRT for Sarcoma

Delivery of radiation therapy utilizing IMRT (Intensity-Modulated Radiation Therapy) for sarcoma may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5226 Radiation therapy utilizing IMRT for sarcoma that has originated in the head and neck region may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 35 fractions or less 1, 7; and BOTH of the following:
 - A 3D planning has been performed and compared to the IMRT 9;
 - § IMRT would substantially decrease normal tissue compared to a non-IMRT technique; and ANY of the following:
 - The Dmax to the mandible is greater than 60 Gy with a 3D plan 9;
 - The D50 to the ipsilateral parotid is greater than 30 Gy with a 3D plan 8;
 - The D50 to the contralateral parotid is greater than 24 Gy with a 3D plan ₈;
 - The optic chiasm receives greater than 45 Gy with a 3D plan 9;
 - The spinal cord would receive greater than 45 Gy with a 3D plan 9;



- Patient is high risk for recurrence 7 and the same or immediately adjacent area received previous XRT.
- Ind. 5237 Radiation therapy utilizing IMRT for sarcoma that has originated from the abdominal cavity or thoracic cavity may be reasonable and appropriate ₂ when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 35 fractions or less_{1, 3, 4, 5, 6}; and **BOTH** of the following:
 - **§** A 3D planning has been performed and compared to the IMRT 4, 5;
 - § IMRT would substantially decrease normal tissue compared to a non-IMRT technique 5; and ANY of the following:
 - The 3D plan would result in the spinal cord receiving a dose of greater than 45 Gy 5, 6;
 - The 3D plan would result in the heart would receiving a D100 of greater than 40 Gy;
 - The 3D plan would result in 2/3 of the kidney receiving a dose of at least 30 Gy 5;
 - The 3D plan would result in V20 of the lung greater than 35%;
 - Treatment to be delivered consists of 35 fractions or less_{1, 3, 6} and ALL of the following:
 - S 3D planning has been performed and compared to the IMRT 6
 - S The patient is high risk 3,6
 - S The same or immediately adjacent area received previous XRT 2
 - •
 - Treatment to be delivered consists of 35 fractions or less ₆; and **BOTH** of the following:
 - § A 3D planning has been performed and compared to the IMRT ; 6



- § IMRT would substantially decrease normal tissue compared to a non-IMRT technique 6 ;
- Ind. 5246 Radiation therapy utilizing IMRT for sarcoma has metastasized to another part of the body may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 5 fractions or less; and BOTH of the following:
 - S 3D planning has been performed and compared to the IMRT and IMRT would substantially decrease normal tissue compared to a non-IMRT technique; and ANY of the following 4:
 - The 3D plan would result in the D50 to the contralateral parotid is greater than 24 Gy 9;
 - The 3D plan would result in the spinal cord receiving greater than 45 Gy 8;
 - The 3D plan would result in the D50 to the ipsilateral parotid is greater than 30 Gy ₈;
 - The 3D plan would result in the optic chiasm will receive greater than 45 Gy ₉;
 - The 3D plan would result in the Dmax to the mandible is greater than 60 Gy 9;
 - 3D planning has been performed and compared to the IMRT ₄, the patient is high risk for recurrence _{3,6} and the same or immediately adjacent area received previous XRT.



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Radiation Therapy Utilizing SBRT for Sarcoma

Delivery of radiation therapy utilizing SBRT (Stereotactic Body Radiation Therapy) for sarcoma may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5228 Radiation therapy utilizing SBRT for sarcoma that has originated in the head and neck region may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 5 fractions or less ₄; and **ALL** of the following:
 - §
 - S The patient has three (3) lesions or less that are being treated₄;
 - S The area being treated is 3 cm or less₄;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4; and EITHER of the following:
 - This is for definitive/curative therapy₄;
 - Patient has received radiation to this site previously 1
 - This is treatment for an isolated local recurrence 4; The patient has four (4) lesions or more that are being treated 4.
- Ind. 5249 Radiation therapy utilizing SBRT for sarcoma that has metastasized to another part of the body may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:



- Treatment to be delivered consists of 5 fractions or less _{2, 4, 5}; and **ALL** of the following:
 - S The patient has three (3) lesions or less that are being treated 4;
 - S The area being treated is 3 cm or less 3, 4;
 - Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80); and ANY of the following 2,4:
 - •
 - This is for definitive/curative therapy 2, 4;
 - Patient has received radiation to this site previously 1, 2, 3
 - This is treatment for an isolated local recurrence 2, 4;



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Radiation Therapy Utilizing 2D-3D/IMRT/SBRT or Brachytherapy for Skin Cancer

Delivery of radiation therapy utilizing 2D-3D (Two-Dimensional/Three Dimensional) IMRT (Intensity-Modulated Radiation Therapy) SBRT (Stereotactic Body Radiation Therapy) or Brachytherapy for skin cancer may be medically appropriate and supported by evidence to improve patient outcomes for the following indications. Unless otherwise stated, patients should demonstrate physical capability and appropriate clinical status as evidenced by either an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).

- Ind. 5095 Radiation therapy utilizing 2D-3D for non-melanoma skin cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care
 - Treatment to be delivered consists of 33 fractions or less 8 and an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80)..
- Ind. 5105 Radiation therapy utilizing 2D-3D for melanoma or Merkel cell skin cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:



- Treatment to be delivered consists of 10 fractions or less for palliative care
- Treatment to be delivered consists of 33 fractions or less 1 and an Eastern
 Cooperative Oncology Group ECOG Performance Status Grade of less than or
 equal to one (1) OR a KPS Grade of greater than or equal to eighty (80).
- Ind. 5106 Radiation therapy utilizing IMRT for melanoma or Merkel cell skin cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Treatment to be delivered consists of 11-33 fractions_{1, 7}, when the patient is receiving treatment for **ANY** of the following:
 - Metastasis to the brain 1;
 - Metastasis to the liver₁;
 - Metastasis to the lung 1.
 - Metastasis to the bone 1
 - Treatment to be delivered consists of 10 fractions or less _{1, 2, 8}when the patient is receiving treatment for ANY of the following:
 - **§** Metastasis to the brain 1, ;
 - Metastasis to the liver₁;
 - Metastasis to the lung 1.
- Ind. 5108 Radiation therapy utilizing SBRT for melanoma or Merkel cell skin cancer may be reasonable and appropriate when the patient's medical record demonstrates EITHER of the following:
 - Treatment to be delivered consists of 5 fractions or less 1, 5; and ALL of the following:



- The patient has three (3) lesions or less that are being treated 5, 6; The area being treated is 3 cm or less 1, 5, 6 and ANY of the following;
 - This is for definitive/curative therapy;
 - Patient has received radiation to this site previously;
 This is treatment for an isolated local recurrence 6.
- The patient has four (4) lesions or more that are being treated, 6.

Ind. 5099 Radiation therapy utilizing Brachytherapy for non-melanoma skin cancer may be reasonable and appropriate when the patient's medical record demonstrates ALL of the following:

- Treatment to be delivered consists of 8 fractions or less 9;
- The lesion being treated is less than 3 cm 10;
- Patient is being treated with traditional brachytherapy (non-electronic) 3.4.
- Ind. 5109 Radiation therapy utilizing Brachytherapy for melanoma or Merkel cell skin cancer may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Treatment to be delivered consists of 4 fractions or less 11, 12;
 - The patient is post-operative 12;
 - Electronic brachytherapy will be used 12.



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Radiation Therapy Utilizing 2D-3D for Other Cancer Types

Delivery of radiation Therapy utilizing 2D-3D (Two-Dimensional/Three-Dimensional) for other cancer types may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Ind. 5085 Radiation therapy utilizing 2D-3D for thymoma or thymic carcinoma may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Treatment to be delivered consists of 10 fractions or less for palliative care $_{1, 6}$.
 - Treatment to be delivered consists of 35 fractions or less 1, 2, 3, 5 with an Eastern Cooperative Oncology Group ECOG Performance Status Grade of less than or equal to one (1) OR a KPS Grade of greater than or equal to eighty (80) 4.



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Radiation Therapy: Proton Beam

Delivery of Radiation Therapy utilizing Proton Beam Radiation Therapy (PBRT) for various cancer indications may be medically appropriate and supported by evidence to improve patient outcomes for the following indications and cancer types.

Cancer of the Brain, Primary or Metastatic

- Radiation therapy utilizing PBRT for the treatment of primary or metastatic disease of the brain may be reasonable and appropriate when the patient's medical record demonstrates that the member is enrolled in a clinical trial.

Cancer of the Eye

- Radiation therapy utilizing PBRT for the treatment of primary or metastatic disease of the brain may be reasonable and appropriate when the patient's medical record demonstrates that the member is enrolled in a clinical trial.
- PBRT utilization with less than 30 fractions where a non-PBRT approach would increase tissue toxicity in a patient who has an ECOG of 2 or greater or a KPS of 70 or less may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Treatment request for retinoblastoma;
 - Treatment request for uveal melanoma;
 - Treatment request for orbital lymphoma.



Leukemia Treatment

- Radiation therapy utilizing PBRT for the treatment of leukemia may be reasonable and appropriate when the patient's medical record demonstrates that the member is enrolled in a clinical trial.

Multiple Myeloma or Plasmacytoma

- Radiation therapy utilizing PBRT for the treatment of multiple myeloma or plasmacytoma may be reasonable and appropriate when the patient's medical record demonstrates that the member is enrolled in a clinical trial

Pediatric Application for Cancer Treatment

Delivery of Radiation Therapy utilizing Proton Beam Radiation Therapy (PBRT) for Pediatric Malignancies may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Radiation therapy utilizing PBRT for a pediatric malignancy may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Less than 18 years of age;
 - Treatment to be delivered consists of 31 fractions or less;
 - No additional forms of radiation therapy are being utilized;
 - There is a positive tissue diagnosis;
 - The current stage is T1-T2.

All other application of PBRT not previously noted above will require review by the Medical Director and/or individual health plan to determine medical appropriateness.





APPENDIX A: PROCEDURE CODES MANAGED BY HEALTHHELP

Any procedure codes that have been associated with this HealthHelp Clinical Guideline are for informational use only. The inclusion of a code in this guideline does not guarantee coverage or reimbursement by the individual health plan.

ONCOLOGY	
RADIATION THERAPY	
2D3D	CODES:
Radiation treatment delivery, superficial and/or ortho voltage, per day	77401
Radiation treatment delivery, >1 MeV; simple	77402
Radiation treatment delivery, >1 MeV; intermediate	77407
Radiation treatment delivery, >1 MeV; complex	77412
Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: up to 5MeV	G6003
Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: 6-10MeV	G6004
Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: 11-19MeV	G6005
Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks: 20MeV or greater	G6006
Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: up to 5MeV	G6007
Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 6-10MeV	G6008
Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 11-19MeV	G6009
Radiation treatment delivery, 2 separate treatment areas, 3 or more ports on a single treatment area, use of multiple blocks: 20MeV or greater	G6010
Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; up to 5MeV	G6011
Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 6-10MeV	G6012



Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 11-19MeV	G6013
Radiation treatment delivery, 3 or more separate treatment areas, custom blocking, tangential ports, wedges, rotational beam, compensators, electron beam; 20MeV or greater	G6014
Brachytherany	CODES
Intraoperative radiation treatment delivery, x-ray, single treatment session	77424
Intraoperative radiation treatment delivery, electrons, single treatment session	77425
Infusion or instillation of radioelement solution (includes 3 months follow-up care)	77750
Intracavitary radiation source application; simple	77761
Intracavitary radiation source application; intermediate	77762
Intracavitary radiation source application; complex	77763
Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter up to 2.0 cm or 1 channel	77767
Remote afterloading high dose rate radionuclide skin surface brachytherapy, includes basic dosimetry, when performed; lesion diameter over 2.0 cm and 2 or more channels, or multiple lesions	77768
Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 1 channel	77770
Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; 2-12 channels	77771
Remote afterloading high dose rate radionuclide interstitial or intracavitary brachytherapy, includes basic dosimetry, when performed; over 12 channels	77772
Interstitial radiation source application, complex, includes supervision, handling, loading of radiation source, when performed	77778
Surface application of low dose rate radionuclide source	77789



High dose rate electonic brachytherapy, skin surface application, per fraction, includes basic dosimetry, when performed	0394T
High dose rate electonic brachytherapy, interstitial or intracavitary treatment, per fraction, includes basic dosimetry, when performed	0395T
Low dose rate (LDR) prostate brachytherapy services, composite rate	G0458
IMRT	CODES:
Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; simple	77385
Intensity modulated radiation treatment delivery (IMRT), includes guidance and tracking, when performed; complex	77386
Intensity modulated treatment delivery, single or multiple fields/arcs, via narrow spatially and temporally modulated beams, binary, dynamic MLC, per treatment session	G6015
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	G6016
Neutron Therapy	CODES:
Neutron Therapy 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)	CODES : 77423
Neutron Therapy 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)	CODES: 77423
Neutron Therapy 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) Proton Beam	CODES: 77423 CODES:
Neutron TherapyHigh 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)Proton Beam Proton treatment delivery; simple, without compensation	CODES: 77423 CODES: 77520
Neutron Therapy 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) Proton Beam Proton treatment delivery; simple, without compensation Proton treatment delivery; simple, with compensation	CODES: 77423 CODES: 77520 77522
Neutron TherapyHigh 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)Proton BeamProton treatment delivery; simple, without compensationProton treatment delivery; simple, with compensationProton treatment delivery; intermediate	CODES: 77423 CODES: 77520 77522 77523
Neutron TherapyHigh 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)Proton BeamProton treatment delivery; simple, without compensationProton treatment delivery; simple, with compensationProton treatment delivery; intermediateProton treatment delivery; complex	CODES: 77423 CODES: 77520 77522 77523 77525
Neutron Therapy 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) Proton Beam Proton treatment delivery; simple, without compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; ntermediate Proton treatment delivery; complex	CODES: 77423 CODES: 77520 77522 77523 77525
Neutron Therapy 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) Proton Beam Proton treatment delivery; simple, without compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; neuronality Proton treatment delivery; complex Stereotactic Radiosurgery	CODES: 77423 CODES: 77520 77522 77523 77525 CODES:
Neutron Therapy 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) Proton Beam Proton treatment delivery; simple, without compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; net remediate Proton treatment delivery; complex Stereotactic Radiosurgery Thoracic target(s) delineation for stereotactic body radiation therapy (SRS/SBRT), (photon or particle beam), entire course of treatment	CODES: 77423 CODES: 77520 77522 77523 77525 CODES: 32701
Neutron Therapy 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) Proton Beam Proton treatment delivery; simple, without compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; simple, with compensation Proton treatment delivery; complex Stereotactic Radiosurgery Thoracic target(s) delineation for stereotactic body radiation therapy (SRS/SBRT), (photon or particle beam), entire course of treatment Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 simple cranial lesion	CODES: 77423 CODES: 77520 77522 77523 77525 CODES: 32701 61796



Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 complex cranial lesion	61798
Stereotactic radiosurgery (particle beam, gamma ray, or linear accelerator); 1 spinal lesion	63620
Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; multi-source Cobalt 60 based	77371
Radiation treatment delivery, stereotactic radiosurgery (SRS), complete course of treatment of cranial lesion(s) consisting of 1 session; linear accelerator based	77372
Stereotactic body radiation therapy, treatment delivery, per fraction to 1 or more lesions, including image guidance, entire course not to exceed 5 fractions	77373
Image guided robotic linear accelerator-based stereotactic radiosurgery, complete course of therapy in one session, or first session of fractionated treatment	G0339
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	G0340