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UPDATED 04.09.2019

CLINICAL GUIDELINES

Diagnostic Imaging:

Cancer Indications

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 the 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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Unspecified Coding Notation

The following procedure codes can be applied to all policies for their specific modality.

CT Scan:

Computed tomography, limited or localized follow-up study	76380
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MRI Scan:

Magnetic resonance imaging (MRI), low-field	S8042
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Computed Tomography of the Abdomen

Utilization of a computerized tomography (CT) of the abdomen may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Follow up evaluation of an obstructive lesion, failed colonoscopy of unknown malignancy may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a contraindication to air contrast barium enema with no risk of perforation; and **EITHER** of the following:
 - Patient has had a failed colonoscopy;
 - Imaging/colonoscopy illustrates a cancerous lesion and the proximal colon should be evaluated for additional synchronous structures.

- Surveillance study for follow-up to colorectal cancer after primary treatment has been completed may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - o Patient has been previously treated for Stage II or III colorectal cancer; and **ANY** of the following:
 - New or enlarging abdominal or pelvic mass is appreciated on physical examination;
 - Patient has undergone aggressive treatment and/or surgery and is considered to be at high risk for recurrence; and **EITHER** of the following:
 - It has been at least six (6) months since the previous CT of the abdomen was performed;
 - Recent laboratory study demonstrates rising carcinoembryonic antigen (CEA) levels, after treatment and/or resection.
 - It has been at least three (3) months since the previous CT of the abdomen was performed;
 - o Patient is greater than or equal to three (3) months post-chemotherapy completion.

- Surveillance study to evaluate for suspected or confirmed metastatic primary colorectal cancer may be reasonable and appropriate when the patient's medical record demonstrates **BOTH** of the following:
 - Patient has clinical or biochemical suspicion of metastasis;
 - Prior imaging has established T staging of the primary tumor.

The procedure codes that are associated with this policy are listed below.

CT Abdomen	CODES:
Computed tomography, abdomen; without contrast material	74150
Computed tomography, abdomen; with contrast material(s)	74160
Computed tomography, abdomen; without contrast material, followed by contrast material(s) and further sections	74170

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Computed Tomography of the Brain

Utilization of a computerized tomography (CT) of the brain may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Magnetic resonance imaging (MRI)/CT fusion for radiation therapy planning (with CT simulation) may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Patient has not received a MRI or a CT of the brain in the last two (2) months;
 - o Pre- or post-operative MRI/CT demonstrates significant artifact which is documented in the imaging report;
 - o Pre- or post-operative MRI/CT has slices that are greater than 5mm.

- Surveillance study for known brain cancer with recent imaging study that is suggestive of more than one (1) metastatic lesion.

- Surveillance study to evaluate for secondary tumor or metastatic involvement of the brain may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Staging of biopsy or cytology proven metastatic small cell lung cancer;
 - o Staging of biopsy or cytology proven metastatic non-small cell lung cancer (Stage T3 or greater);
 - o Staging of biopsy or cytology proven metastatic breast cancer;
 - o Staging of metastatic melanoma;
 - o Staging of other metastatic cancer not previously mentioned.

The procedure codes that are associated with this policy are listed below.

CT Head/Brain	CODES:
Computed tomography, head or brain; without contrast material	70450
Computed tomography, head or brain; with contrast material(s)	70460
Computed tomography, head or brain; without contrast material, followed by contrast materials(s) and further sections	70470

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Computed Tomography of the Chest

Utilization of a computerized tomography (CT) of the Chest may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Lung cancer screening study may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient is between the ages of 55 and 77 and has not had a CT of the chest in the past twelve (12) months; asymptomatic, i.e., no hemoptysis, active infection, or pneumonia in the last twelve (12) weeks and no symptoms of lung cancer present; and **EITHER** of the following:
 - Current smoker with at least a 30 pack year history;
 - Less than a 30 pack year smoking history; and **ANY** of the following:
 - Has had exposure to radon, asbestos or occupational carcinogens;
 - History of COPD or pulmonary fibrosis;
 - Family history of lung cancer.

- Positron Emission Tomography (PET)/CT fusion for radiation therapy planning (with CT simulation) to treat breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not received a CT scan within two (2) months of planning for radiation therapy; and **EITHER** of the following:
 - Patient has positive internal mammary lymph nodes and underwent neoadjuvant chemotherapy, internal mammary nodes are no longer visible;
 - Patient has a solitary area of bone metastasis that will be treated with the breast simultaneously.

- Evaluation post-treatment of breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - No positron emission testing (PET) in the last three (3) months; and **EITHER** of the following:
 - Patient is status post radiation therapy;
 - Patient has residual palpable disease on examination;
 - Disease is ER-negative, PR-negative, and HER2 negative.

- Evaluation post-chemotherapy or hormone therapy for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates that the patient has not had a PET in the last three (3) months and has completed definitive drug therapy.

- Pre-surgical evaluation for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a CT of the chest in the past three (3) months; and **ANY** of the following:
 - Tumor has close proximity to the chest wall or the brachial plexus;
 - Suspicious secondary abnormality is present;
 - Pre-operative CT needed for surgical determination of mastectomy vs lumpectomy.

- Utilization for breast cancer staging may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a CT of the chest in the past six (6) months; and **ANY** of the following:
 - Two (2) or more abnormalities were detected on mammogram or ultrasound of the breast;
 - Patient has a known clinical diagnosis of Stage 3A or greater cancer;

- Skin changes or erythema with clinical suspicion of inflammatory breast cancer is present;
 - Patient age is less than or equal to 45 and have extremely dense breast tissue.
- Restaging of breast cancer due to positive clinical findings or new symptoms may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
- Changes in the patient's treatment plan are anticipated pending the results of this restaging CT scan; and **EITHER** of the following:
 - Patient has no prior distant metastasis and the last CT of the chest was performed more than four (4) months ago;
 - MRI or PET scan demonstrate suspicion for metastatic disease to the bone, liver or lung.
 - Recent serum tumor marker level was elevated and the last CT of the chest was performed more than four (4) months ago.
- Evaluation for metastasis or recurrence of breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a CT of the chest in the past four (4) months; and **ANY** of the following:
 - BRCA 1 or BRCA 2 positive;
 - Diagnosis of Li Fraumani Syndrome;
 - Palpable node(s) are present;
 - Elevated serum tumor marker level;
 - HER2 negative;
 - Skin erythema or involvement;
 - Biopsy has proven that there is lymph node involvement;

- Previous imaging with PET/CT, MRI, CT, or mammogram demonstrates recurrence;
 - Soft tissue mass is illustrated on mammogram;
 - Previous cancer staged as clinical Stage II, III, or IV.
- Evaluation of a prior positive lung cancer screening or radiologic abnormality, with non-solid nodule presence may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient is 77 years of age or younger; and **ANY** of the following:
 - CT demonstrates a nodule measuring between 5 and 10 mm in diameter, it has been at least six (6) months since the last CT of the chest was performed, patient is high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 5 and 10 mm in diameter, it has been at least twelve (12) months since the last CT of the chest was performed, patient is not high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - Patient has a suspected lung infection or hemoptysis, it has been more than a month since the last CT scan of the chest was performed and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring greater than 10mm in diameter, it has been at least three (3) months since the last CT of the chest was performed and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring greater than 10mm in diameter, it has been at least three (3) months since the last CT of the chest was performed and they have had four to five (4-5) screening CT scans in their lifetime.

- Evaluation of a prior positive lung cancer screening or radiologic abnormality, with a solid nodule presence may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient is 77 years or age or younger; and **ANY** of the following:
 - CT demonstrates a nodule measuring between 4 and 6mm, it has been at least 6 months since the last CT scan, patient is high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 4 and 6mm, it has been at least 12 months since the last CT scan, patient is low risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 4 and 6mm, it has been at least 12 months since the last CT scan, patient is high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 6 and 8mm, it has been at least 6 months since the last CT scan, patient is low risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 6 and 8mm, it has been at least 6 months since the last CT scan, patient is high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring between 6 and 8mm, it has been at least 3 months since the last CT scan, patient is high risk for lung cancer and they have had three (3) or fewer screening CT scans in their lifetime;

- Patient has a suspected lung infection or hemoptysis, it has been more than a month since the last CT scan of the chest was performed and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 3 months since the last CT scan, and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 6 months since the last CT scan, and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 12 months since the last CT scan, and they have had three (3) or fewer screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 3 months since the last CT scan, and they have had four to five (4-5) screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 6 months since the last CT scan, and they have had four to five (4-5) screening CT scans in their lifetime;
 - CT demonstrates a nodule measuring 8mm, it has been at least 12 months since the last CT scan, and they have had four to five (4-5) screening CT scans in their lifetime;
- Restaging of lung cancer post-chemotherapy or chemo radiation therapy may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient underwent their last chemotherapy or chemo radiation therapy treatment greater than six (6) weeks ago; and **EITHER** of the following:
 - Patient has not received a CT of the chest within the last six (6) post treatment months; and **EITHER** of the following:

- This imaging is post-primary chemotherapy or chemo radiation therapy for known Stage III or IV disease;
 - This imaging is post-adjuvant chemotherapy or chemo radiation therapy;
- Disease persistence is suggested by symptoms and/or clinical findings, weight loss of greater than 10% of the patient's total body weight in the past six (6) months with known Stage III or IV disease.
- Restaging of lung cancer post radiation therapy may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient underwent last radiation treatment greater than three(3) months ago; and **EITHER** of the following:
 - Disease persistence is suggested by symptoms and/or clinical findings, weight loss of greater than 10% of the patient's total body weight in the past six (6) months;
 - Patient with known Stage III or IV disease and it has been greater than six (6) months since the last post treatment CT of the chest was performed;
 - Patient with known Stage III or IV disease, no radiographic evidence of disease present, and it has been greater than six (6) months since the last post-treatment CT of the chest was performed.
- Restaging of lung cancer post-surgical resection may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Stage IIIB lung cancer;
 - Stage IV lung cancer;
 - Negative margins (R0, no residual tumor);
 - Patient underwent the last surgical resection greater than three (3) months ago and has Stage I through IIIA lung cancer with greater than six (6) months since the last CT of the chest was performed.

- Pre-treatment for lung cancer evaluation may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - It has been greater than three (3) months since the last CT of the chest was performed;
 - Patient is now planning on initiating chemotherapy, radiation therapy or both;
 - Lung cancer has been diagnosed via positive biopsy.

- Evaluation of suspected metastatic or recurrent lung cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has experienced weight loss of greater than 10% of the patient's total body weight in the past six (6) months;
 - Focal skeletal pain;
 - Neurological signs are present, i.e., headache, syncope, seizures, extremity weakness, or recent change in mental status;
 - Supraclavicular lymphadenopathy;
 - Suspicion of superior vena cava syndrome;
 - Bone tenderness;
 - Hepatomegaly;
 - Papilledema;
 - Hematocrit level that is less than 40% in a male patient or less than 35% in a female patient;
 - Elevated alkaline phosphatase, glutamyltransferase, aspartate transaminase, or calcium level.

The procedure codes that are associated with this policy are listed below.

CT Chest	CODES:
Computed tomography, thorax; without contrast material	71250
Computed tomography, thorax; with contrast material(s)	71260
Computed tomography, thorax; without contrast material, followed by contrast materials(s) and further sections	71270
Low dose CT scan (LDCT) for lung cancer screening	G0297

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Computed Tomography of the Pelvis

Utilization of a computerized tomography (CT) of the pelvis may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Evaluation post-radiation therapy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months; the PSA level is currently less than 10 ng/mL but there was a subsequent rise in the PSA after completion of radiation therapy of greater than 2 ng/mL; patient is a candidate for local therapy; and **EITHER** of the following:
 - Biochemical failure of radiation therapy;
 - Abnormal digital rectal examination.
- Evaluation post-radical prostatectomy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months; and **EITHER** of the following:
 - Detectable PSA after radical prostatectomy;
 - Subsequent recurrence in PSA after initial undetectable determination in two (2) or more instances post prostatectomy.
- Evaluation of response to systemic therapy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months;
 - o Patient has received first line systemic therapy and/or secondary androgen therapy;
 - o PSA rising post systemic therapy.

- Primary staging for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not has a CT or MRI of the pelvis with contrast in the past three (3) months; and **ANY** of the following:
 - Patient is symptomatic and suspected of having primary prostate cancer Stage T1 or T2 with nomogram demonstrating lymph nodal risk of greater than 10%;
 - Patient is symptomatic and suspected of having primary prostate cancer Stage T3 or T4;
 - Patient has a life expectancy of greater than five (5) years and suspected of having primary prostate cancer Stage T1 or T2 with nomogram demonstrating lymph nodal risk of greater than 10%;
 - Patient has a life expectancy of greater than five (5) years and suspected of having primary prostate cancer Stage T3 or T4.
- Evaluation of known hyperplasia of the prostate may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - o Previous cancer Stage T2 or greater;
 - o Gleason score of six (6) or greater from most recent biopsy;
 - o Greater than 50% prostate cancer in any core;
 - o Greater than three (3) biopsy cores reveal presence of disease;
 - o PSA density is greater than 0.15ng/mL/g.

The procedure codes that are associated with this policy are listed below.

CT Pelvis	CODES:
Computed tomography, pelvis; without contrast material	72192
Computed tomography, pelvis; with contrast material(s)	72193
Computed tomography, pelvis; without contrast material, followed by contrast material(s) and further sections	72194

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Computed Tomography of the Cervical Spine

Utilization of a computerized tomography (CT) of the cervical spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre or post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy: and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;

- Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

CT Cervical Spine	CODES:
Computed tomography, cervical spine; without contrast material	72125
Computed tomography, cervical spine; with contrast material	72126
Computed tomography, cervical spine; without contrast material, followed by contrast material(s) and further sections	72127

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Computed Tomography of the Lumbar Spine

Utilization of a computerized tomography (CT) of the lumbar spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre or Post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy; and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;

- Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

CT Lumbar Spine	CODES:
Computed tomography, lumbar spine; without contrast material	72131
Computed tomography, lumbar spine; with contrast material	72132
Computed tomography, lumbar spine; without contrast material, followed by contrast material(s) and further sections	72133

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Computed Tomography of the Thoracic Spine

Utilization of a computerized tomography (CT) of the thoracic spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre or Post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy: and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;

- Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

CT Thoracic Spine	CODES:
Computed tomography, thoracic spine; without contrast material	72128
Computed tomography, thoracic spine; with contrast material	72129
Computed tomography, thoracic spine; without contrast material, followed by contrast material(s) and further sections	72130

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Magnetic Resonance Imaging of the Brain

Utilization of a magnetic resonance imaging (MRI) of the brain may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- MRI fusion for radiation therapy planning for brain cancer treatment with CT simulation may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Patient has not had an MRI of the brain in the last two (2) months;
 - o Pre- or post-operative MRI has significant artifact documented per the report;
 - o Pre- or post-operative MRI has slices that are greater than 5mm.

- Initial evaluation post-radiation therapy for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates that the patient has not received an MRI of the brain within the last six (6) weeks.

- Initial evaluation post- chemotherapy therapy for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates that the patient has not received an MRI of the brain within the last six (6) weeks.

- Post-operative evaluation for procedure to treat brain cancer may be reasonable and appropriate when the patient's medical record demonstrates that it has been between twenty-four (24) and seventy-two (72) hours since the operation was performed; and **ANY** of the following:
 - o Follow-up after resection of primary brain tumor;
 - o Follow-up to stereotactic biopsy;

- Follow-up to open biopsy or debulking of tumor;
 - Follow-up to implantation of chemotherapy wafers.
- Follow-up evaluation of a known benign primary tumor of the brain may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past six (6) months; and **ANY** of the following:
 - Edema;
 - Headache;
 - Intracranial pressure is elevated;
 - Subdural bleed within the last month;
 - Focal neurological symptoms;
 - Psychiatric disorders;
 - Fatigue;
 - Endocrine disorders;
 - New, worsening, or severe spine pain;
 - Change in mental status.
- Follow-up evaluation after the initial post treatment staging of brain cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past two (2) months; and **ANY** of the following:
 - Prior MRI illustrates complete or acceptable radiological response post radiation therapy;
 - Prior MRI illustrates unacceptable radiological response post radiation therapy;

- Prior MRI illustrates complete or acceptable radiological response post chemotherapy;
 - Prior MRI illustrates unacceptable radiological response post chemotherapy;
 - Prior MRI illustrates complete tumor resection post operatively;
 - Prior MRI illustrates incomplete tumor resection post operatively;
 - Biopsy or MRI findings are concordant with CNS lymphoma.
- Follow-up evaluation of CNS lymphoma may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past month; and **EITHER** of the following:
 - Lumbar puncture with cerebrospinal fluid analysis has been performed greater than one month ago;
 - Biopsy and MRI findings are concordant with CNS lymphoma.
- Initial evaluation for primary brain tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past three (3) months; and **ANY** of the following:
 - Edema;
 - Headache;
 - Intracranial pressure is elevated;
 - Subdural bleed within the last month;
 - Focal neurological symptoms;
 - Psychiatric disorders;
 - Fatigue;
 - Endocrine disorders;
 - New, worsening or severe spine pain;

- Change in mental status.
- Evaluation of suspected secondary brain tumor or metastatic disease involving the brain may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past two (2) months; and **ANY** of the following:
 - Edema;
 - Headache;
 - Intracranial pressure is elevated;
 - Subdural bleed within the last month;
 - Focal neurological symptoms;
 - Psychiatric disorders;
 - Fatigue;
 - Endocrine disorders;
 - New, worsening or severe spine pain;
 - Change in mental status;
 - Staging of biopsy or cytology proven metastatic small cell lung cancer or non-small cell lung cancer;
 - Staging of biopsy or cytology proven metastatic breast cancer;
 - Staging of biopsy or cytology proven melanoma;
 - Staging of biopsy or cytology proven primary malignancy not previously listed above.
- Follow-up evaluation for imaging suggesting metastasis of primary brain tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not had a MRI of the brain within the past two (2) months; and **ANY** of the following:

- Known personal history of brain cancer;
- Biopsy and MRI findings are concordant with disseminated systemic disease; and **ANY** of the following:
 - Disease is resectable;
 - Disease is unresectable;
 - MRI demonstrates at least one (1) metastatic lesion.
- Biopsy and MRI findings are concordant with stable systemic disease; and **ANY** of the following:
 - Disease is resectable;
 - Disease is unresectable;
 - MRI demonstrates at least one (1) metastatic lesion.

The procedure codes that are associated with this policy are listed below.

MRI Brain	CODES:
Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material	70551
Magnetic resonance (e.g., proton) imaging, brain (including brain stem); with contrast material	70552
Magnetic resonance (e.g., proton) imaging, brain (including brain stem); without contrast material, followed by contrast material(s) and further sequences	70553
Magnetic resonance imaging, brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, not requiring physician or psychologist administration	70554
Magnetic resonance imaging, brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, requiring physician or psychologist administration of entire neurofunctional testing	70555

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Magnetic Resonance Imaging of the Breast

Utilization of a magnetic resonance imaging (MRI) of the breast may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Magnetic resonance imaging (MRI)/CT fusion for radiation therapy planning (with CT simulation) to treat breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Tumor incompletely excised during surgery or surgical contraindication;
 - o Tumor is surgically non-resectable or patient has a surgical contraindication;
 - o Pre- or post-operative MRI has slices greater than 5mm.

- Evaluation post-chemotherapy or hormone therapy for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Residual palpable tumor after two (2) cycles;
 - o New palpable area on examination;
 - o Inflammatory changes present on skin;
 - o Residual palpable tumor persists after neo-adjuvant chemotherapy;
 - o Original cancer not visible on mammogram and last MRI of the breast was more than six (6) months ago;
 - o Cancer has been previously detected on MRI of the breast but the last MRI of the breast was more than six (6) months ago.

- Evaluation post-radiation therapy for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:

- Patient's last MRI of the breast was more than six (6) months ago; and **EITHER** of the following:
 - Multi-focal or multi-centric breast cancer;
 - Inflammatory changes not resolving within three (3) months of completing radiation therapy.

- Evaluation post-operatively for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Prior ultrasound of the breast or mammogram was non-diagnostic or demonstrated discordant results;
 - Patient's last MRI of the breast was more than six (6) months ago; and **EITHER** of the following:
 - Ductal carcinoma in situ (DCIS);
 - Positive surgical margins.

- Pre-operative evaluation for breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Prior ultrasound of the breast or mammogram was non-diagnostic or demonstrated discordant results in patient with heterogeneously dense breast tissue;
 - Extremely dense breast tissue;
 - Patient's last MRI of the breast was more than six (6) months ago; and **ANY** of the following:
 - Tumor has close proximity to chest wall or brachial plexus;
 - Suspicious secondary abnormality;
 - Pre-operative MRI needed for surgical determination of mastectomy vs lumpectomy.

- Breast cancer screening may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - o Patient's last MRI of the breast was more than six (6) months ago; and **ANY** of the following:
 - Prior ultrasound of the breast or mammogram was non-diagnostic or demonstrated discordant results in patient with extremely dense breast tissue;
 - Lifetime risk of 20% or greater as defined by BRCAPRO or other models largely depended on family history of breast cancer;
 - BRCA1 or BRCA2 positive;
 - Personal history of radiation therapy to the chest between the ages of 10 and 30;
 - Personal history or Li-Fraumeni, Cowden, or Bannayan-Riley-Ruvalcaba syndrome or there is a first-degree relative with one of these syndromes;
 - DCIS, primary breast tumor;
 - Patient has silicone or saline implants and/or free injections with silicone, paraffin, or polyacrylamide gel.
 - o Suspicious abnormality with high likelihood of malignancy.

- Breast cancer staging utilizing MRI may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient's last MRI of the breast was more than six (6) months ago; and **ANY** of the following:
 - Two (2) or more abnormalities were detected on mammogram or ultrasound of the breast;
 - Patient has a known clinical diagnosis of Stage 3A or greater cancer;
 - Skin changes or erythema with clinical suspicion of inflammatory breast cancer is present;

- Patient age is less than or equal to 45 and has extremely dense breast tissue.
- Evaluation of a suspicious lesion, lump, or mass in the breast without confirmed malignancy may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient's last MRI of the breast was more than six (6) months ago; and **ANY** of the following:
 - Patient age is less than or equal to 45 and has extremely dense breast tissue;
 - Prior ultrasound of the breast or mammogram was non-diagnostic or demonstrated discordant results in patient with extremely dense breast tissue;
 - Tumor originally detected on previous MRI;
 - Multi-focal or multi-centric breast cancer;
 - Suspicious abnormality on mammogram;
 - Mass does not fluctuate with menstrual cycle.
 - New palpable mass detected on examination; and **ANY** of the following:
 - Breast tissue is almost entirely fatty;
 - There are scattered areas of fibro glandular density;
 - Prior ultrasound of the breast or mammogram was non-diagnostic or demonstrated discordant results.
 - Lifetime risk of 20% or greater as defined by BRCAPRO or other models largely dependent on family history of breast cancer; and **EITHER** of the following:
 - Mammogram findings are highly suggestive of malignancy;
 - Mammogram findings are suspicious.
 - Suspicious mammogram findings with nipple retraction or discharge present.

- Evaluation of recurrent breast cancer due to new symptoms and/or restaging may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient age is less than or equal to 45; and **ANY** of the following:
 - Patient's last MRI of the breast was more than six (6) months ago;
 - Mammogram illustrated two (2) or more new abnormalities;
 - Cancer has previously not been visible on mammogram.

The procedure codes that are associated with this policy are listed below.

MRI Breast	CODES:
Magnetic resonance imaging, breast, without contrast material; unilateral	77046
Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (CAD real-time lesion detection, characterization and pharmacokinetic analysis), when performed; unilateral	77048
Magnetic resonance imaging with contrast, breast; unilateral	C8903
Magnetic resonance imaging without contrast followed by with contrast, breast; unilateral	C8905
Magnetic resonance imaging, breast, without contrast material; bilateral	77047
Magnetic resonance imaging, breast, without and with contrast material(s), including computer-aided detection (CAD real-time lesion detection, characterization and pharmacokinetic analysis), when performed; bilateral	77049
Magnetic resonance imaging with contrast, breast; bilateral	C8906
Magnetic resonance imaging without contrast followed by with contrast, breast; bilateral	C8908

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Magnetic Resonance Imaging of the Chest

Utilization of a magnetic resonance imaging (MRI) of the chest may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Magnetic resonance imaging (MRI)/CT fusion for radiation therapy planning (with CT simulation) to treat lung cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - o Patient has not received an MRI of the chest in the last two (2) months of radiation therapy planning;
 - o Pre- or post-operative MRI has slices that are greater than 5mm.

The procedure codes that are associated with this policy are listed below.

MRI Chest	CODES:
Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s)	71550
Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); with contrast material(s)	71551
Magnetic resonance (e.g., proton) imaging, chest (e.g., for evaluation of hilar and mediastinal lymphadenopathy); without contrast material(s), followed by contrast material(s) and further sequences	71552

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Magnetic Resonance Imaging of the Pelvis

Utilization of a magnetic resonance imaging (MRI) of the pelvis may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Evaluation post-radiation therapy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months; the PSA level is currently less than 10 ng/mL but there was a subsequent rise in the PSA after completion of radiation therapy of greater than 2 ng/mL; patient is a candidate for local therapy; and **EITHER** of the following:
 - Biochemical failure of radiation therapy;
 - Abnormal digital rectal examination.

- Evaluation post-radical prostatectomy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months; and **EITHER** of the following:
 - Detectable PSA after radical prostatectomy;
 - Subsequent recurrence in PSA after initial undetectable determination in two (2) or more instances post prostatectomy.

- Evaluation of response to systemic therapy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - o Patient has not has a CT of the pelvis with contrast in the past three (3) months;

- Patient has received first line systemic therapy and/or secondary androgen therapy;
- PSA rising post systemic therapy.

- Primary staging for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not has a CT or MRI of the pelvis with contrast in the past three (3) months; and **ANY** of the following:
 - Patient is symptomatic and suspected of having primary prostate cancer Stage T1 or T2 with nomogram demonstrating lymph nodal risk of greater than 10%;
 - Patient is symptomatic and suspected of having primary prostate cancer Stage T3 or T4;
 - Patient has a life expectancy of greater than five (5) years and suspected of having primary prostate cancer Stage T1 or T2 with nomogram demonstrating lymph nodal risk of greater than 10%;
 - Patient has a life expectancy of greater than five (5) years and suspected of having primary prostate cancer Stage T3 or T4.

- Evaluation of known hyperplasia of the prostate may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Previous cancer Stage T2 or greater;
 - Gleason score of six (6) or greater from most recent biopsy;
 - Greater than 50% prostate cancer in any core;
 - Greater than three (3) biopsy cores reveal presence of disease;
 - PSA density is greater than 0.15ng/mL/g.

The procedure codes that are associated with this policy are listed below.

MRI Pelvis	CODES:
Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s)	72195
Magnetic resonance (e.g., proton) imaging, pelvis; with contrast material(s)	72196
Magnetic resonance (e.g., proton) imaging, pelvis; without contrast material(s), followed by contrast material(s) and further sequences	72197

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Magnetic Resonance Imaging of the Spine: Cervical

Utilization of a magnetic resonance imaging (MRI) of the cervical spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy, or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre- or post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy; and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;

- Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

MRI Cervical Spine	CODES:
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; without contrast material	72141
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, cervical; with contrast material(s)	72142
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; cervical	72156

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Magnetic Resonance Imaging of the Spine: Lumbar

Utilization of a magnetic resonance imaging (MRI) of the lumbar spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy, or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre- or post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy; and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;

- Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

MRI Lumbar Spine	CODES:
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; without contrast material	72148
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, lumbar; with contrast material(s)	72149
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; lumbar	72158

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Magnetic Resonance Imaging of the Spine: Thoracic

Utilization of a magnetic resonance imaging (MRI) of the thoracic spine may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Post-operative evaluation for brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Maximal safe tumor resection was performed;
 - o Stereotactic, biopsy, or subtotal resection was performed and repeat operation to complete resection has been considered if maximal resection was not achieved;
 - o Surgery was performed within the last three (3) weeks;
 - o Pre- or post-operative MRI/CT has slices that are greater than 5mm.

- Evaluation of suspected metastatic meningeal or spine tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - o Patient has a diagnosed cancer or known malignancy; and **ANY** of the following:
 - New or worsening local spine pain;
 - New or worsening mechanical back pain;
 - New or worsening radicular pain with suspected spinal cord compression;
 - New or worsening neurological symptoms;
 - Cerebrospinal fluid analysis positive for tumor cells;
 - Prior MRI/CT was positive for bone involvement;
 - Asymptomatic patient with incidental findings;
 - Patient is a candidate for radiation therapy and/or intra-CSF chemotherapy.

The procedure codes that are associated with this policy are listed below.

MRI Thoracic Spine	CODES:
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, thoracic without contrast material	72146
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, thoracic with contrast material(s)	72147
Magnetic resonance (e.g., proton) imaging, spinal canal and contents, without contrast material, followed by contrast material(s) and further sequences; thoracic	72157

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Positron Emission Tomography Scan: Whole Body

Utilization of positron emission tomography (PET) scan of the whole body may be medically appropriate and supported by evidence to improve patient outcomes for the following indications.

- Evaluation for radiation therapy planning in the treatment of brain cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient has a pre-operative PET scan which indicated activity in the brain;
 - Patient has not has a brain PET scan within the last two (2) months.

- Follow-up to imaging suggesting metastasis of primary brain tumor may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has a known history of brain cancer with at least one lesion present on MRI of the brain.

- Evaluation for radiation therapy planning in the treatment of breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a PET scan within two (2) months of radiation planning; and **EITHER** of the following:
 - Positive internal mammary lymph nodes;
 - Patient has a solitary area of bone metastasis that will be treated simultaneously with the breast.

- Evaluation post-radiation therapy for the treatment of primary breast cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient has not has a PET scan within the last three (3) months with residual palpable disease;
 - ER-negative, PR-negative, and HER2 negative disease.

- Evaluation post-chemotherapy or hormone therapy for the treatment of primary breast cancer may be reasonable and appropriate when the patient's medical record demonstrates that the patient has completed definitive drug therapy and has not had a PET scan within the last three (3) months.

- Utilization for pre-operative evaluation of breast cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a PET scan within the last three (3) months; and **ANY** of the following:
 - Tumor has close proximity to the chest wall or brachial plexus;
 - Suspicious secondary abnormality;
 - Pre-operative PET needed for surgical determination of mastectomy vs lumpectomy.

- Utilization for initial staging of primary breast cancer may be reasonable and appropriate when the patient's medical record demonstrates that the patient has not had a PET scan within the last six (6) months.

- Utilization for restaging of breast cancer due to positive clinical findings or new symptoms may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - MRI or CT scan illustrated suspicion of bone, lung, or liver metastasis and changes to the treatment plan are anticipated pending the PET results;
 - Elevated serum tumor markers are present and patient has not had a PET within the last four (4) months;

- Patient has a history of prior distant metastasis and has not had a PET within the last four (4) months; a change to the treatment plan is anticipated pending the PET results.

- Evaluation of metastasis or recurrence may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a PET scan within the last four (4) months; and **ANY** of the following:
 - BRCA 1 or BRCA 2 positive;
 - Personal history or Li-Fraumeni Syndrome;
 - Palpable nodule;
 - Elevated serum tumor marker;
 - HER2 negative disease;
 - Skin erythema/involvement;
 - Lymph node biopsy is positive for disease;
 - Soft tissue mass on mammogram;
 - Previous imaging was positive for recurrence.

- Evaluation of colorectal cancer recurrence or response to therapy may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Rising CEA levels; and EITHER of the following:
 - Surgical treatment was more than a month ago;
 - Radiation and/or chemotherapy completed more than three (3) months ago;
 - CT and /or MRI indeterminate; and EITHER of the following:
 - Surgical treatment was more than a month ago;
 - Radiation and/or chemotherapy completed more than three (3) months ago.

- Pre-operative evaluation of colorectal cancer may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Patient is a candidate for surgical resection;
 - Prior imaging suggests potentially surgically curable M1 disease;

- Suspicion for extrahepatic or extra pulmonary metastasis;
- Prior imaging illustrates equivocal lesions.

- Evaluation for radiation therapy planning in the treatment of lung cancer may be reasonable and appropriate when the patient's medical record demonstrates **EITHER** of the following:
 - Patient has not has a PET scan performed within four (4) weeks of radiation therapy planning;
 - Patient has a solitary area of bone metastasis that will be treated simultaneously with the lung.

- Pre-treatment evaluation for lung cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a PET scan within the last three (3) months; and **EITHER** of the following:
 - Medial biopsy is positive for lung cancer; and **ANY** of the following:
 - N2;
 - N3;
 - N4.
 - CT of the chest findings are positive or suspicious for lung cancer; and **ANY** of the following:
 - T2aN0;
 - T2bN0;
 - T3N0;
 - T4N0;
 - N1.

- Utilization for staging of lung cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not had a PET scan within the last three (3) months; and **EITHER** of the following:

- Mediastinal biopsy is positive for lung cancer; and **ANY** of the following:
 - N2;
 - N3;
 - N4.
 - CT of the chest findings are positive or suspicious for lung cancer; and **ANY** of the following:
 - T2aN0
 - T2bN0
 - T3N0
 - T4N0
 - N1
- Evaluation of a pulmonary nodule or lung mass on imaging for a patient who has a history of cancer that did not originate in the lung may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
- History of biopsy proven cancer originating outside the lung, excluding skin cancer; and **EITHER** of the following:
 - Enlarged mediastinal and/or hilar lymph node(s);
 - Bone lesion of undetermined significance;
 - Most recent biopsy was positive for cancer;
 - Pulmonary nodule measuring between 1 and 1.5cm with enlarged mediastinal and/or hilar lymph node(s);
 - Pulmonary nodule measuring less than 1cm with enlarged mediastinal and/or hilar lymph node(s) and no history of granulomatosis disease.
- Evaluation of prostate cancer post-radiation therapy may be reasonable and appropriate when the patient's medical record demonstrates the following:
- Patient has not has a CT of the pelvis with contrast in the past three (3) months; the PSA level is currently less than 10 ng/mL but there was a subsequent rise in the PSA after completion of radiation therapy of greater than 2 ng/mL; patient is a candidate for local therapy; and **EITHER** of the following:

- Biochemical failure of radiation therapy;
 - Abnormal digital rectal examination.
- Evaluation post-radical prostatectomy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has not has a CT of the pelvis with contrast in the past three (3) months; and **EITHER** of the following:
 - Detectable PSA after radical prostatectomy;
 - Subsequent recurrence in PSA after initial undetectable determination in two (2) or more instances post prostatectomy.
 - Evaluation of response to systemic therapy for prostate cancer may be reasonable and appropriate when the patient's medical record demonstrates **ALL** of the following:
 - Patient has not has a CT of the pelvis with contrast in the past three (3) months;
 - Patient has received first line systemic therapy and/or secondary androgen therapy;
 - PAS rising post systemic therapy.
 - Evaluation of bladder cancer for restaging may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than three (3) months ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed chemotherapy more than a month ago.
 - Utilization for initial staging of bladder cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.
 - Utilization for initial staging of stomach, small intestine cancer, or gastrointestinal stromal tumor (GIST) may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Evaluation of stomach, small intestine cancer, or gastrointestinal stromal tumor (GIST) for restaging may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than a month ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed chemotherapy more than a month ago.

- Utilization for initial staging of cervical cancer may be reasonable and appropriate when the patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound.

- Evaluation of cervical cancer for restaging/recurrence may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than three (3) months ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed chemotherapy more than a month ago.

- Utilization for initial staging of colorectal cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Utilization for initial staging of esophageal cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Evaluation of esophageal cancer for restaging may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than three (3) months ago;
 - Patient had surgical intervention more than a month ago;

- Patient completed chemotherapy more than a month ago.
- Evaluation of esophageal cancer for response to therapy may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than three (3) months ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed definitive drug therapy more than a month ago.
- Utilization for initial staging of head and neck cancers, excluding CNS and thyroid cancers, may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.
- Evaluation of head and neck cancers, excluding CNS and thyroid cancers, for restaging may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than three (3) months ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed chemotherapy more than a month ago.
- Evaluation of head and neck cancers, excluding CNS and thyroid cancers, for response to therapy may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - Patient completed radiation therapy more than four (4) months ago;
 - Patient had surgical intervention more than a month ago;
 - Patient completed chemotherapy more than four (4) months ago.
- Utilization for initial staging of ovarian cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Utilization for restaging of ovarian cancer may be reasonable and appropriate when the patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound.
- Utilization for initial staging of pancreatic/biliary cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.
- Utilization for restaging of pancreatic/biliary cancer may be reasonable and appropriate when the patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound.
- Utilization for initial staging of renal cell cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.
- Utilization for restaging of renal cell cancer may be reasonable and appropriate when the patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound.
- Utilization for initial staging of testicular cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.
- Utilization for restaging or recurrent testicular cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Patient has completed treatment; and **EITHER** of the following:
 - Patient had surgical intervention more than a month ago; and **EITHER** of the following:
 - Residual mass(es) are demonstrated on conventional imaging;
 - Elevated serum tumor marker.

- Patient completed chemotherapy more than a month ago; and **EITHER** of the following:
 - Residual mass(es) are demonstrated on conventional imaging;
 - Elevated serum tumor marker.

- Utilization for initial staging or restaging of thyroid cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Post-thyroidectomy for medullary thyroid cancer with recent MRI/CT negative for disease; and **EITHER** of the following:
 - Elevated serum calcitonin, greater than 10ng/mL;
 - CEA level of greater than 6ng/mL.

- Utilization for recurrent or residual thyroid cancer may be reasonable and appropriate when the patient's medical record demonstrates the following:
 - Post-thyroidectomy; and **ANY** of the following:
 - Poorly differentiated thyroid cancer; and **ANY** of the following:
 - Extra-thyroidal disease;
 - Multi-focal thyroidal disease;
 - Capsular or vascular invasion;
 - Elevated serum thyroglobulin (greater than 10ng/mL) and a negative I-131 total body scan;
 - Well differentiated thyroid cancer with elevated serum thyroglobulin (greater than 10ng/mL) and a negative I-131 total body scan;
 - Post radioiodine ablation for follicular cell thyroid cancer with elevated serum thyroglobulin (greater than 10ng/mL) and a negative I-131 total body scan.

- Utilization for initial staging of cancer of unknown origin may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Utilization for initial staging of ureteral cancer may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Utilization for initial staging of uterine (endometrial) may be reasonable and appropriate when the patient has had biopsy or cytology report, which is positive for the disease.

- Utilization for initial staging of vaginal cancer may be reasonable and appropriate when the patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound.

- Evaluation of vaginal cancer for restaging may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Patient completed radiation therapy more than three (3) months ago;
 - o Patient had surgical intervention more than a month ago;
 - o Patient completed chemotherapy more than a month ago.

- Evaluation of prostate cancer for restaging or monitoring response to therapy may be reasonable and appropriate when the patient's medical record demonstrates **ANY** of the following:
 - o Patient completed radiation therapy more than three (3) months ago;
 - o Patient had surgical intervention more than a month ago;
 - o Patient completed chemotherapy more than a month ago.
 - o Patient has had negative results returned from conventional imaging studies, i.e., CT, MRI, ultrasound, along with rising PSA levels.

The procedure codes that are associated with this policy are listed below.

PET	CODES:
Positron emission tomography (PET) imaging; limited area (e.g., chest, head/neck)	78811
Positron emission tomography (PET) imaging; skull base to mid-thigh	78812
Positron emission tomography (PET) imaging; whole body	78813
Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (e.g., chest, head/neck)	78814
Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh	78815
Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body	78816
PET imaging whole body; melanoma for noncovered indications	G0219
PET imaging, any site, not otherwise specified	G0235
PET imaging, full and partial-ring PET scanners only, for initial diagnosis of breast cancer and/or surgical planning for breast cancer (e.g., initial staging of axillary lymph nodes)	G0252

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