MetroPlus Health

Policy and Procedure

Title: High Tech Imaging Studies (CT, MRI, PET)	Division: Medical Management Department: Utilization Management
Approval Date: 6/27/2022	LOB: Medicaid, Medicare, HIV SNP, CHP, MetroPlus Gold, Goldcare I&II, Market Plus, Essential, HARP
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1) **POLICY DESCRIPTION:** This policy will outline the criteria for review of requests for Computed Tomography (CT) of the spine, Magnetic Resonance Imaging (MRI) of the spine, and Positron Emission Tomography (PET) for both oncologic and cardiac indications.

2) **RESPONSIBLE PARTIES:** Medical Management Administration, Utilization Management, Integrated Care Management, Pharmacy, Claim Department, Providers Contracting.

3) **DEFINITIONS: (All of these imaging methods are non-invasive)**

Ionizing radiation: high energy particles (photons) that can penetrate through the body; these particles have some risk of cancer or birth defects. CT and PET use ionizing radiation, MRI does not.

Computed Tomography (CT scan or CAT scan): X-rays are sent through thebody from many angles. X-ray detectors send information to a computer that creates images of internal body parts.

Magnetic Resonance Imaging (MRI): A powerful magnet temporarily “magnetizes” some atoms. Sensors detect the spin of the magnetized atoms. A computer turns that information into images of internal body parts.

Positron Emission Tomography (PET) Scan: A patient is given a radioactive tracer which produces a tiny amount of antimatter (a positron). A positron that comes in contact with matter (an electron) produces radiation, which the PET scanner detects. Body parts with low tracer levels are “cold spots”. High tracer levels are “hot spots”. A stroke or heart attack may show up as a cold spot; hot spots may show cancer.

4) **POLICY:**

I. Computed Tomography (CT or CAT) Scan and Magnetic Resonance Imaging (MRI)

a) MetroPlusHealth requires prior authorization for computed tomography (CT) and magnetic resonance imaging (MRI) of the spine. CT or MRI of the spine is considered medically necessary when ***any*** of the following criteria are met:
   1) Clinical evidence of spinal stenosis
      a) CT with myelography may be preferable to an MRI for imaging of bony anatomy with neural elements however, this procedure is invasive with an

inherent risk of complications so therefore, MRI without contrast is preferred unless contraindicated.

b) If an MRI is performed and a CT with myelography is subsequently ordered, the ordering physician must present an evidence-based indication for performing the second imaging.

2) Clinical suspicion of a spinal cord or cauda equina compression syndrome.
3) Congenital anomalies or deformities of the spine.
4) Evaluation of recurrent symptoms after spinal surgery(1).
5) Evaluation prior to epidural injection to rule out tumor of infection and to delineate the optimal location for performing the injection.
6) Follow-up evaluation for spinal malignancy or spinal infection.
7) Known or suspected myelopathy for initial diagnosis when MRI of the brain is negative or symptoms mimic those of other spinal or brainstem lesions.
8) Known or suspected primary spinal cord tumors (malignant or non-malignant).
9) Persistent back or neck pain with radiculopathy as evidenced by pain *and* objective findings of motor or reflex changes in the specific nerve root distribution *and* no improvement after 6 weeks of conservative management(2).
10) Primary spinal bone tumors or suspected vertebral, paraspinal, or intraspinal metastases.
11) Progressively severe symptoms despite conservative management(2).
12) Rapidly progressing neurological deficit or major motor weakness.
13) Severe back pain including:
    a) Subacute or chronic low back pain with or without radiculopathy.
    b) Initial imaging for persistent or progressive symptoms during or following 6 weeks of optimal conservative treatment in surgery or intervention candidates.
    c) Initial imaging for low back pain with suspected cauda equina syndrome.
14) Spondylolisthesis and degenerative disease of the spine that has not responded to 4 weeks of conservative management**.
15) Suspected infectious process such as osteomyelitis, or epidural abscess of the spine or soft tissue.
16) Suspected spinal fracture and/or dislocation secondary to trauma when x-rays are not conclusive within six (6) weeks of the trauma.
17) Suspected transverse myelitis.

b) MRI is the preferred method of imaging for each of the medically necessary indications above except for a suspected spinal fracture and/or dislocation secondary to trauma when x-rays are not conclusive.
c) MetroPlusHealth considers the following CT or MRI testing not medically necessary:
    1) MRI for further evaluation of an unstable injury in neurologically intact patients with blunt trauma after a negative cervical spine CT result.

2) MRI or CT for evaluation of chronic mechanical low back pain without radiculopathy, neurologic deficit, trauma, or clinical suspicion of systemic disorders (e.g., infectious process, metastatic disease) unless the back pain is severe (e.g., requiring hospitalization) or where symptoms are progressing despite conservative management.
3) MRI or CT for evaluation of non-specific low back pain that cannot be attributed to a specific disease or spinal abnormality.
4) MRI or CT for evaluation of non-specific low back pain within the first 6 weeks of symptoms appearing.

d) MetroPlusHealth considers MRI and CT of the spine for all other indications other than those listed above experimental/investigational because their clinical value has not been established.
e) Requests for repeat CT or MRI of the same section of the spine within a 12-month span require Medical Director review for final determination.

(1) MRI with and without gadolinium enhancement is the preferred method of imaging for evaluation of recurrent symptoms after spinal surgery.

(2) Conservative management includes moderate activity, analgesics, non-steroidal anti-inflammatory drugs, muscle relaxants.

II. Positron Emission Tomography (PET) Scans for Oncologic Indications

a) MetroPlusHealth considers initial PET scans medically necessary for the below list of oncologic indications for any of the following indications:
1) To avoid an invasive diagnostic procedure or to assist in determining the optimal anatomic location to perform an invasive diagnostic procedure when other diagnostic imaging has been performed and has yielded inconclusive results.
2) To determine staging following a tissue diagnosis (biopsy) of a solid tumor when one of the following are met:
a) The stage of the cancer remains in doubt after completion of a standard diagnostic work-up including CT scan, MRI, or ultrasound.
b) The use of PET would potentially replace one or more conventional imaging studies when it is expected that conventional study results will be insufficient for the clinical management of the member.
3) For characterization of newly discovered Solitary Pulmonary Nodules (SPNs) in persons without known malignancy when both of the following conditions are met:
a) A concurrent thoracic CT scan has been performed.
b) A single indeterminate or possibly malignant lesion, more than 0.8cm and not exceeding 4cm in diameter, has been detected (usually by CT).

4) When the study is used for Radiotherapy Planning (RT); contouring and planning the radiation fields.

b) MetroPlusHealth considers repeat PET scans medically necessary for any of the following indications:
   1) For re-staging after completion of treatment for the purpose of any of the following:
      a) Detecting residual disease.
      b) Detecting suspected recurrence in persons with signs or symptoms of recurrence.
      c) To determine the extent of recurrence.
      d) The use of PET would potentially replace one or more conventional imaging studies when it is expected that conventional study results will be insufficient for the clinical management of the patient.
   2) To assess response to treatment during or after therapy.
   3) For follow-up or surveillance; for assessment of disease in the absence of critical evidence of recurrence. Follow-up PET scan intervals should be at least 12 weeks.

List of Oncologic Indications

- Anal cancer; all requests for this diagnosis require Medical Director review
- Appendiceal cancer
- Brain tumors
- Breast cancer
- Burkitt's lymphoma
- Cervical cancer
- Chronic lymphocytic leukemia/small lymphocytic lymphoma with suspected Richter's transformation
- Colorectal cancer
- Diffuse large B-cell lymphoma
- Esophageal cancer
- Ewing sarcoma and osteosarcoma
- Follicular lymphoma
- Gastric cancer
- Gastrointestinal stromal tumors
- Head and neck cancers (excluding cancers of the central nervous system)
- Hodgkin lymphoma
- Mantle cell lymphoma
- Marginal Zone and MALT lymphoma
- Merkel cell carcinoma; all requests for this diagnosis require Medical Director review

- Mesothelioma
- Multiple Myeloma
- Non-Hodgkin's lymphoma
- Non-small cell lung carcinoma
- Ovarian cancer
- Pancreatic cancer
- Post-transplant lymphoproliferative disorder; all requests for this diagnosis require secondary review
- Primary cutaneous B-cell lymphoma
- Small cell lung carcinoma
- Small bowel adenocarcinoma
- Soft tissue sarcoma
- Solitary pulmonary nodules for diagnosis only, Medical Director review is required for any other reason
- T-cell lymphoma
- Testicular cancer
- Thymic malignancies
- Thyroid cancer

c) Requests for approval of a PET scan for any other indication not listed above require Medical Director review for final determination.

III. Positron Emission Tomography (PET) Scans for Cardiac Indications

a) MetroPlusHealth considers PET scans medically necessary for the following cardiac indications:
   1) Evaluation of Coronary Artery Disease (CAD) when either of the following criteria are met:
      a) The PET scan is used in place of, but not in addition to, a single photon emission computed tomography (SPECT), in persons who meet medical necessity criteria for a SPECT.
      b) For use in assessment of possible CAD after cardiac transplant.
   2) Assessment of Myocardial Viability: Prior to re-vascularization, either as a primary or initial diagnostic study or following an inconclusive SPECT.
   3) Assessment of Myocardial Viability: Prior to re-vascularization, either as a primary or initial diagnostic study with a fixed defect on a SPECT
   4) Assessment of patients prior to referral for cardiac transplantation.
   5) To differentiate ischemic and non-ischemic cardiomyopathy.
   6) To differentiate benign cardiac lesions from malignant lesions.

7) To monitor the cardiac effect of chemotherapy on known malignancies.
8) Cardiac Sarcoid: When cardiac sarcoid is strongly suspected.

b) MetroPlusHealth considers PET for absolute quantitation of myocardial blood flow (AQMBF) experimental and investigational because the value of this test in guiding clinical management has not been established.
c) Requests for repeat Cardiac PET scans within a 12-month span require Medical Director review for final determination.

5) LIMITATIONS/ EXCLUSIONS: One (1) CT/MRI of the spine within a 12-month period; one (1) Cardiac PET scan within a 12-month period.

6) APPLICABLE PROCEDURE CODES:

CPT	Description
72125	Computed tomography, cervical spine; without contrast material
72126	Computed tomography, cervical spine; with contrast material
72127	Computed tomography without contrast material, followed by contrast material(s) and further sections
72128	Computed tomography, thoracic spine; without contrast material
72129	Computed tomography, thoracic spine; with contrast material
72130	Computed tomography, thoracic spine without contrast material, followed by contrast material(s) and further sections
72131	Computed tomography, lumbar spine; without contrast material
72132	Computed tomography, lumbar spine; with contrast material
72133	Computed tomography, lumbar spine without contrast material, followed by contrast material(s) and further sections
72141	Magnetic resonance imaging, spinal canal, and contents, cervical; without contrast material
72142	Magnetic resonance imaging, spinal canal, and contents, cervical; with contrast material
72146	Magnetic resonance imaging, spinal canal, and contents, thoracic; without contrast material
72147	Magnetic resonance imaging, spinal canal, and contents, thoracic; with contrast material
72148	Magnetic resonance imaging, spinal canal, and contents, lumbar; without contrast material

72149	Magnetic resonance imaging, spinal canal, and contents, lumbar; with contrast material
72156	Magnetic resonance imaging, spinal canal, and contents, without contrast material followed by contrast material(s) and further sequences; cervical
72157	Magnetic resonance imaging, spinal canal, and contents, without contrast material followed by contrast material(s) and further sequences; thoracic
72158	Magnetic resonance imaging, spinal canal, and contents, without contrast material followed by contrast material(s) and further sequences; lumbar
78429	Myocardial imaging, positron emission tomography (PET), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study; with concurrently acquired computed tomography transmission scan
78430	Myocardial imaging, positron emission tomography (PET), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), single study, at rest or stress (exercise of pharmacologic), with concurrently acquired computed tomography transmission scan
78431	Myocardial imaging, positron emission tomography (PET), metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), multiple studies, at rest or stress (exercise of pharmacologic), with concurrently acquired computed tomography transmission scan
78432	Myocardial imaging, positron emission tomography (PET), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (e.g., myocardial viability)
78433	Myocardial imaging, positron emission tomography (PET), combined perfusion with metabolic evaluation study (including ventricular wall motion[s] and/or ejection fraction[s], when performed), dual radiotracer (e.g., myocardial viability) with concurrently acquired computed tomography transmission scan
78434	Absolute quantitation of myocardial blood flow (AQMBF), positron emission tomography (PET), rest and pharmacologic stress (List separately in addition to code for primary procedure)
78459	Myocardial imaging, positron emission tomography (PET), metabolic evaluation
78491	Myocardial imaging, positron emission tomography (PET), metabolic evaluation
78492	Myocardial imaging, positron emission tomography (PET), metabolic evaluation, multiple studies at rest or stress

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REVISION LOG:

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Approved: Glendon Henry Digitally signed by Glendon Henry Date: 2022.10.04 11:01:18 -04'00' **Date:**	**Approved:** Sanjiv Shah MD Digitally signed by Sanjiv Shah MD Date: 2022.10.04 12:14:54 -04'00' **Date:**
Glendon Henry, MD **Senior Medical Director**	**Sanjiv Shah, MD** **Chief Medical Officer**

Medical Guideline Disclaimer:

 The treating physician or primary care provider must submit MetroPlus Health Plan clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, Metroplus Health Plan will not be able to properly review the request for prior authorization. The clinical review criteria expressed in this policy reflects how MetroPlus Health Plan determines whether certain services or supplies are medically necessary. MetroPlus Health Plan established the clinical review criteria based upon a review of currently available clinical information(including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health

professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). MetroPlus Health Plan expressly reserves the right to revise these conclusions as clinical information changes, and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered andor paid for by MetroPlus Health Plan, as some programs exclude coverage for services or supplies that MetroPlus Health Plan considers medically necessary. If there is a discrepancy between this guidelines and a member's benefits program, the benefits program will govern. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members. All coding and website links are accurate at time of publication.

MetroPlus Health Plan has adopted the herein policy in providing management, administrative and other services to our members, related to health benefit plans offered by our organization.