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Developed By: Medical Criteria Committee	

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**Description:**

A single-photon emission computerized tomography (SPECT) scan is a type of nuclear imaging test. A radioactive substance and a specialized camera are used to create three-dimensional images of organs and body structures. While other imaging tests, such as an x-ray or MRI, can show what the structures inside the body look like, a SPECT scan produces images that show how they function. A radionuclide is injected intravenously which is then absorbed by body tissues as it is circulated in the blood. Depending on which organ of the body is being imaged, physicians may use one of several different radioactive chemicals, or tracers. Different tracers are taken up by different organs from which they emit weak radiation that is picked up by the camera to form a visual image of that organ.

**Criteria:**

- I. ODS will cover SPECT scans up to plan limitations for **any** the following indications:
  - A. Diagnosis of coronary artery disease in members with an uninterpretable resting electrocardiogram and restricted exercise tolerance
  - B. Assessing myocardial viability prior to a revascularization procedure
  - C. Diagnosing and assessing hemangiomas of the liver
  - D. Assessment of osteomyelitis to distinguish bone from soft tissue infection
  - E. Localization of abscess for suspected or known localized infection or inflammatory process
  - F. Differentiation of necrotic tissue from a brain tumor
  - G. Diagnosis and staging of neuroendocrine tumors
  - H. Detection of spondylolysis and stress fractures
  - I. Imaging of parathyroids in parathyroid disease
  - J. Lymphoma, to distinguish tumor from necrosis
  - K. Presurgical ictal detection of seizure focus in members with epilepsy
  
- II. ODS will review on a case-by-case basis, SPECT scan requests for any of the following when other imaging studies are inconclusive or contraindicated:
  - A. Bone and skeletal disorders
  - B. Gastrointestinal disorders
  - C. Hepatobiliary and hepatosplenic disorders
  - D. Infections and inflammation
  - E. Lung disorders
  - F. Lymphatic disorders
  - G. Renal and urinary disorders
  - H. Thyroid disorders
  - I. Tumors
  
- III. ODS considers SPECT scans experimental and investigational for other indications, including but not limited to any of the following, because its diagnostic value has not been established in peer reviewed medical literature:
  - A. Chronic fatigue syndrome
  - B. Screening for coronary artery disease in asymptomatic, low risk individuals
  - C. Initial or differential diagnosis of members with suspected dementia or Alzheimer's disease
  - D. Diagnosis or assessment of stroke

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- E. Diagnosis or assessment of members with attention deficit/hyperactivity disorder
- F. Diagnosis or assessment of members with autism or pervasive developmental disorders
- G. Diagnosis or assessment of members with personality disorders
- H. Diagnosis or assessment of members with schizophrenia
- I. Diagnosis or assessment of other psychiatric or neuropsychiatric disorders
- J. Differential of Parkinson's disease from other Parkinsonian syndromes

**Information to be Submitted with Pre-Authorization Request:**

- Medical records from the ordering physician documenting the clinical indications for which the SPECT scan is being ordered and reports from other imaging studies if applicable.

**Applicable CPT/HCPC:**

**Note: this list may not be all inclusive**

<b>78205</b>	Liver imaging (SPECT)
<b>78206</b>	Liver imaging (SPECT) with vascular flow
<b>78320</b>	Bone and/or joint imaging, tomographic (SPECT)
<b>78464</b>	Myocardial perfusion imaging; tomographic (SPECT), single study (including attenuation correction when performed), at rest or stress (exercise and/or pharmacologic), with or without quantification
<b>78465</b>	Myocardial perfusion imaging, tomographic (SPECT), multiple studies (including attenuation correction when performed), at rest and/or stress (exercise and/or pharmacologic) and redistribution and/or rest injection, with or without quantification.
<b>78469</b>	Myocardial imaging, tomographic SPECT with or without quantification
<b>78494</b>	Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing
<b>78607</b>	Brain imaging, tomographic (SPECT)
<b>78647</b>	Cerebrospinal fluid flow, imaging, tomographic (SPECT)
<b>78710</b>	Kidney imaging, tomographic (SPECT)
<b>78803</b>	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s), limited area, tomographic (SPECT)
<b>78807</b>	Radiopharmaceutical localization of inflammatory process, limited area, tomographic (SPECT)

**References:**

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