



## Positron Emission Tomography (PET) Brain Imaging (Non-oncologic indications):

### CPT CODES:

**78608**.....PET brain, metabolic evaluation

**78609**.....PET brain, perfusion, single study

### IMAGING CONSIDERATIONS:

This guideline does not supersede the enrollee's health plan medical policy specific to PET Neuroimaging.

Enrollee coverage for PET imaging of Alzheimer's disease or Fronto-Temporal Lobe Dementia may be limited to one (1) per lifetime.

Duplicative testing of the same anatomic area may be subject to high-level review, for evaluation of medical necessity.

### COMMON DIAGNOSTIC INDICATIONS FOR BRAIN PET:

*The following diagnostic indications for Brain PET are accompanied by pre-test considerations as well as supporting clinical data and prerequisite information:*

#### REFRACTORY SEIZURES/EPILEPSY

Pre-surgical evaluation to locate the foci of intractable seizure activity, in patients who have failed conventional medical therapy and who are undergoing pre-surgical evaluation.

#### FRONTO-TEMPORAL LOBE DEMENTIA AND ALZHEIMER'S DISEASE

Use of PET is approved only to differentiate between Fronto-Temporal Dementia (FTD) and Alzheimer's Disease, when the patient's clinical presentation fits both diagnoses and other conventional testing has been unable to reveal a definitive diagnosis and when all of the following conditions are met; OR

Use of PET is approved when part of a CMS approved clinical trial specific to diagnosis and treatment of dementing neurodegenerative disease.

## **AIM's CRITERIA TO DETERMINE IF FDG-PET DEMENTIA EVALUATION IS INDICATED AND COVERED**

Criteria appropriate for all insurances using AIM (American Imaging Management)

***The use of FDG-PET scan in the diagnosis of Alzheimer's disease and Fronto-Temporal Lobe Dementia is medically necessary and appropriate provided all of the following conditions are met:***

The patient has a recent diagnosis of Alzheimer's disease or frontal-temporal lobe dementia and a documented cognitive decline of at least six (6) months duration and meets the diagnostic criteria for Alzheimer's disease or fronto-temporal lobe dementia.

The patient's clinical presentation includes such symptoms as:

- Social disinhibition
- Awkwardness
- Difficulties with language, or
- Loss of Executive Function

### **The patient has had a comprehensive clinical evaluation which has included:**

A comprehensive medical history including an assessment of activities of daily living from a well-acquainted informant other than the patient;

A physical and mental status examination formally documenting the patient's cognitive decline for a minimum of six (6) months; and

Cognitive scales or neuropsychological testing, laboratory testing, and structural imaging such as MRI or CT, to aid in identifying structural, metabolic, and chemical abnormalities as a cause for cognitive impairment.

The patient is evaluated by a physician experienced in the diagnosis and assessment of Alzheimer's disease and fronto-temporal lobe dementia.

The results of previous physical and mental examinations, laboratory testing, and structural imaging have not clearly determined either a specific neurodegenerative disease or other cause for the clinical symptoms and the results of the FDG-PET will help clarify the diagnosis of Alzheimer's disease or fronto-temporal lobe dementia, to guide future treatment.

A brain SPECT scan has not been obtained for the same indication.

### **The referring (ordering) provider submits the following medical information regarding the enrollee:**

- Date of onset of the cognitive decline
- Clinical documentation supporting the diagnosis of a clinical syndrome such as Alzheimer's disease or frontotemporal lobe dementia
- Results of a mini-mental status exam (MMSE) or similar test score
- Differential diagnosis of Alzheimer's disease or fronto-temporal lobe dementia
- Results of all neuropsychological testing performed
- Results of all CT and/or MRI structural imaging performed
- Results of recent B12 and Thyroid Hormone laboratory blood tests
- Name(s) of currently prescribed medications