Provider Checklist-Outpatient – Imaging

Checklist: Magnetic Resonance Imaging (MRI) Brain
(CPT Codes: 70551, 70552, 70553, 70554, 70555)

All Indications [*One has to be present]*

*Acute onset persistent neurologic Sx/findings (suspected stroke/CVA) ♦ [Both have to be present]*

Sx/findings [*One has to be present]*

- Sensory deficit
- Motor deficit
- Language deficit
- Cognitive dysfunction of unknown etiology
- Visual impairment
- Altered level of consciousness
- Vertigo with headache/central nystagmus

Symptom onset [*One has to be present]*

- ≤ 3 hrs and CT not feasible
- > 3 hrs

*Follow-up study post stroke/CVA [*One has to be present]*

- Anticoagulation planned
- New/worsening CNS Sx/findings ♦

*New transient neurologic Sx/findings (suspected TIA) ♦ [*One has to be present]*

- Sensory deficit
- Motor deficit
- Language deficit
- Cognitive dysfunction of unknown etiology
- Visual impairment
- Vertigo with headache/central nystagmus

*Headache [*One has to be present]*

- Papilledema by PE
- New headache [*One has to be present]*
Age ≥ 50 and no Hx of headaches
Focal neurologic finding by PE
Headache with syncope by Hx
Mental status changes by Hx/PE
Absent venous pulsations by funduscopic exam
Headache onset with exertion/Valsalva maneuver by Hx
Headache causes awakening from sleep by Hx

Chronic headache [**One has to be present**]

Focal neurologic finding by PE
Headache with syncope by Hx
Mental status changes by Hx/PE
Worsening of previously stable chronic headache by Hx

*Seizure [**One has to be present**]

New onset seizure ♠
Seizures refractory to anticonvulsant medication [**All have to be present**]

Increased seizure activity with therapeutic blood levels of anticonvulsant
≥ 12 wks since initiation of anticonvulsant Rx
No concurrent seizure-provoking medications

*Head trauma ♠ [**Both have to be present**]

Sx/findings [**One has to be present**]

Retrograde/anterograde amnesia
LOC by Hx/PE
Mental status changes by Hx/PE
Vomiting
Focal neurologic finding by PE
Headache by Hx
Seizure by Hx/PE
Coagulopathy by Hx
Skull fracture by PE/x-ray

CT not feasible/nondiagnostic for etiology of Sx/findings

*CNS infection (gadolinium contrast recommended) [**One has to be present**]
Suspected infection in immunocompetent host ♦ [Both have to be present]
New/worsening CNS Sx/findings [One has to be present]

- 1 Focal neurologic finding by PE
- 2 Headache by Hx
- 3 Photophobia
- 4 Meningismus
- 5 Mental status changes by Hx/PE
- 6 Seizure by Hx/PE

Associated findings [One has to be present]

- 1 Temperature > 100.4°F (38.0°C)
- 2 WBC > 12,000/cu.mm (12x10^9/L)

Suspected infection in immunocompromised host ♦ [One has to be present]

- Focal neurologic finding by PE
- Atypical headache by Hx
- Mental status changes by Hx/PE
- Seizure by Hx/PE

Follow-up assessment

*Follow-up of intracranial abscess (gadolinium contrast recommended) [One has to be present]

New/worsening CNS Sx/findings ♦ [One has to be present]

- Focal neurologic finding by PE
- Vomiting
- Headache by Hx
- Mental status changes by Hx/PE
- Seizure by Hx/PE

Follow-up assessment during Rx
Follow-up assessment after Rx completed

*Follow-up of primary brain tumor (gadolinium contrast recommended) [One has to be present]

New/worsening CNS Sx/findings ♦
Periodic assessment
*Single brain tumor by CT (gadolinium contrast recommended)  

*CNS evaluation for brain metastases (gadolinium contrast recommended) [**One has to be present**]  

Initial staging [**One has to be present**]  

- Sarcoma  
- Melanoma  
- Small cell lung cancer  

New CNS Sx/findings and known cancer elsewhere ♦  
Follow-up assessment during radiation Rx/chemotherapy with prior positive CT/MRI  
Follow-up assessment after radiation Rx/chemotherapy completed with prior positive CT/MRI  
Known brain metastasis [Both have to be present]  

- Prior CT/MRI positive  
- New/worsening CNS Sx/findings ♦  

*Follow-up of AVM (Arteriovenous Malformation)  

*Post intracranial procedure/craniotomy/craniectomy [**One has to be present**]  

- New/worsening CNS Sx/findings ♦  
- Follow-up assessment  

*Suspected CNS involvement with systemic disease [**One has to be present**]  

- Systemic lupus erythematosus (SLE)/vasculitis  
- HIV  
- Sarcoidosis (gadolinium contrast recommended)  

*Multiple sclerosis (MS) [**One has to be present**]  

Suspected MS [**One has to be present**]  

Clinically isolated syndrome (gadolinium contrast recommended) [**One has to be present**]  

- 1 Optic neuritis by Hx/PE  
- 2 Ophthalmoplegia  
- 3 Transverse myelitis by Hx/PE
CNS deficit not in dermatomal/peripheral nerve distribution and other etiologies excluded [**One has to be present**]

- 1 Sensory deficit
- 2 Motor dysfunction

Loss of coordination and other etiologies excluded

Known MS with new/worsening symptoms (gadolinium contrast recommended)

*Acoustic neuroma/cerebellar pontine angle tumor (gadolinium contrast recommended) [**One has to be present**]

Suspected acoustic neuroma/cerebellar pontine angle tumor [**Both have to be present**]

Unilateral hearing loss/tinnitus with ear normal by PE Findings [**One has to be present**]

- 1 Asymmetric neural hearing loss by audiometry
- 2 Abnormal acoustic reflex testing
- 3 Roll-over by phonetically balanced word testing

Follow-up known acoustic neuroma [**One has to be present**]

6 mos from diagnosis/annual follow-up
Post radiosurgery/surgical excision

*Vestibular neuronitis [**All have to be present**]

Vertigo with associated Sx/findings [**One has to be present**]

- Nausea/vomiting
- Nystagmus
- Postural instability

Ear normal by PE
Continued/worsening vertigo after Rx [**Two have to be present**]

- Antihistamine Rx ≥ 1 wk
- Neuroleptic Rx ≥ 1 wk
- Benzodiazepine Rx ≥ 1 wk
- Anticholinergic Rx ≥ 1 wk
- Hydroxyzine Rx ≥ 1 wk
*Nonacute onset mental status changes [*All have to be present*]

**Sx/findings [*One has to be present*]**

- Memory loss by Hx/PE
- Confusion/disorientation by Hx/PE
- Behavioral disturbance by Hx/PE
- Deterioration in intellectual function by Hx/PE

Depression screening completed

Lab results nondiagnostic for etiology of mental status change [*All have to be present*]

- Na > 128 mEq/L(128 mmol/L)
- Glucose > 60 and < 400 mg/dL(3.33 and < 22.20 mmol/L)
- BUN < 80 mg/dL(28.6 mmol/L)
- Ca < 11 mg/dL(2.75 mmol/L)
- TSH normal
- LFTs/ammonia nondiagnostic for etiology of mental status
- B12 normal
- RPR negative/not indicated

**Urine drug/toxicology screen [*One has to be present*]**

- Negative
- Not indicated

*Suspected cerebral venous thrombosis [*Both have to be present*]

**Headache with associated Sx/findings [*One has to be present*]**

- Papilledema by PE
- Focal neurologic finding by
- Mental status changes by Hx/
- Seizure by Hx/PE

**Finding [*One has to be present*]**

Hypercoagulable

- Skull fracture over dural sinus
- Calvarial mass

Infection [*One has to be present*]

- 1 Sinusitis
- 2 Otitis media
*Hydrocephalus [One has to be present]

Suspected normal pressure hydrocephalus [One has to be present]

- Urinary incontinence
- New onset dementia
- Apraxic gait

Normal pressure hydrocephalus by Hx with new/worsening CNS Sx/findings ♦

Suspected obstructive hydrocephalus [Both have to be present]

Sx/findings [One has to be present]

- 1 Headache by Hx
- 2 Mental status changes by Hx/PE
- 3 Papilledema by PE
- 4 Impaired coordination/ataxia by PE
- 5 Focal neurologic finding by PE
- 6 Seizure by Hx/PE

Risk factor [One has to be present]

- 1 AVM/aneurysm by Hx
- 2 SAH/intraventricular hemorrhage by Hx
- 3 Meningitis
- 4 Hydrocephalus by Hx

*Movement disorder [One has to be present]

- Suspected Huntington's chorea and genetic testing not feasible/refused
- Progressive ataxia of undetermined etiology

*Preoperative assessment stereotactic introduction, subcortical electrodes/stereotactic lesion creation