APPLICATION STATEMENT

The application of the Clinical Coverage Guideline is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any.

DISCLAIMER

The Clinical Coverage Guideline (CCG) is intended to supplement certain standard WellCare benefit plans and aid in administering benefits. Federal and state law, contract language, etc. take precedence over the CCG (e.g., Centers for Medicare and Medicaid Services [CMS] National Coverage Determinations [NCDs], Local Coverage Determinations [LCDs] or other published documents). The terms of a member’s particular Benefit Plan, Evidence of Coverage, Certificate of Coverage, etc., may differ significantly from this Coverage Position. For example, a member’s benefit plan may contain specific exclusions related to the topic addressed in this CCG. Additionally, CCGs relate exclusively to the administration of health benefit plans and are NOT recommendations for treatment, nor should they be used as treatment guidelines. Providers are responsible for the treatment and recommendations provided to the member. The application of the CCG is subject to the benefit determinations set forth by the Centers for Medicare and Medicaid Services (CMS) National and Local Coverage Determinations and state-specific Medicaid mandates, if any. All links are current at time of approval by the Medical Policy Committee (MPC) and are subject to change prior to the annual review date. Lines of business (LOB) are subject to change without notice; current LOBs can be found at www.wellcare.com. All guidelines can be found at this site as well by selecting the Provider tab, then “Tools” and “Clinical Guidelines”.

BACKGROUND

Computed tomography (CT) perfusion imaging provides a quantitative measurement of regional cerebral blood flow. A perfusion CT study involves sequential acquisition of CT sections during intravenous administration of an iodinated contrast agent. Analysis of the results allows the physician to calculate the regional cerebral blood volume, the blood mean transit time through the cerebral capillaries, and the regional cerebral blood flow. CT perfusion imaging has been proposed to be used primarily as a method of evaluating patients suspected of having an acute stroke whenever thrombolysis is considered. CT perfusion imaging may provide information about the presence and site of vascular occlusion, the presence and extent of ischemia, and about tissue viability. This
information may help the clinician determine whether thrombolysis is appropriate. Perfusion computed tomography imaging tracks transient attenuation changes in the blood vessels and brain parenchyma during the first pass passage of an intravenously injected contrast medium. Maps of cerebral blood volume, mean transit time, and cerebral blood flow can be obtained from a pixel-by-pixel analysis of the density changes over time. Generated maps depend on the commercial software and algorithms used in the processing of the data. Currently, three perfusion CT approaches use different data acquisition and analysis methods:

- **Whole Brain CT Perfused Blood Volume.** Assessed by acquiring a helical scan through the whole brain with and without contrast.

- **First Pass Perfusion CT.** A first pass or bolus tracking CT perfusion study is performed by acquiring repeated images at the same location (a cine scan) through a volume of interest during bolus injection and passage of contrast through the region of interest.

- **Dynamic Perfusion CT.** Acquiring a temporal set of images through an extended volume of interest during a bolus injection of contrast constitutes a dynamic perfusion CT study. In this context, the extended volume of interest refers to imaging of tissue beyond the absolute width of the detector array.

**POSITION STATEMENT**

**Applicable To:**
- Medicaid – Hawaii
- Medicare – Easy Choice Health Plan, Hawaii

**NOTE:** For other markets, please refer to the designated vendor for requests.

Computed tomography (CT) perfusion imaging is considered experimental and investigational for assessing members suspected of having an acute stroke or in triaging members with stroke for thrombolytic therapy. CT perfusion imaging is considered experimental/investigational for evaluating members with the following:

- Chronic cerebral ischemia; **OR,**
- Cerebral vasospasm; **OR,**
- Head trauma; **OR,**
- Cerebral gliomas; **OR,**
- Herpes simplex virus encephalitis; **OR,**
- Use in balloon occlusion tests; **OR,**
- Any and all other possible indications.

**CODING**

**Non Covered CPT® Category III Codes**

**0042T**  
Cerebral perfusion analysis using computed tomography with contrast administration, including post-processing of parametric maps with determination of cerebral blood flow, cerebral blood volume, and mean transit time  
Sunset January 2014

**Non-Covered ICD-10-CM Diagnosis Codes**  
*List may not be all inclusive.*

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<th>Code</th>
<th>Description</th>
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<tr>
<td>B00.4</td>
<td>Herpesviral encephalitis; Herpesviral meningoencephalitis</td>
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<td>C71.0 - C71.9</td>
<td>Malignant neoplasm of brain</td>
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<td>G45.9</td>
<td>Transient cerebral ischemic attack, unspecified</td>
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<td>I63.00-I63.039</td>
<td>Cerebral infarction due to thrombosis of unspecified precerebral artery</td>
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<td>I63.6</td>
<td>Cerebral infarction due to cerebral venous thrombosis, nonpyogenic</td>
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<td>Cerebral infarction due to unspecified occlusion or stenosis of unspecified precerebral arteries</td>
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I63.40 Cerebral infarction due to embolism of unspecified cerebral artery
I63.49 Cerebral infarction due to embolism of other cerebral artery
I63.50 Cerebral infarction due to unspecified occlusion or stenosis of cerebral arteries
I63.59 Cerebral artery occlusion, unspecified, with cerebral infarction
I63.311-I63.349 Cerebral thrombosis, with cerebral infarction
I63.411-I63.449 Cerebral embolism, with cerebral infarction
I63.511-I63.549 Cerebral artery occlusion, unspecified, with cerebral infarction
I65.01-I65.9 Occlusion and stenosis of precerebral arteries, not resulting in cerebral infarction
I66.01-I66.3, I66.8, I66.9 Cerebral embolism, (cerebral infarction
I67.2 Cerebral atherosclerosis
I67.841 Reversible cerebrovascular vasoconstriction syndrome
I67.848 Other Cerebral vasospasm and vasoconstriction
S06.0X0A-S06.2X0A Other specified intracranial injury without loss of consciousness, initial encounter
S06.9x0A-S06.9X9A
S06.810A-S06.899A


REFERENCES


MEDICAL POLICY COMMITTEE HISTORY AND REVISIONS

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