Medical Policy
Computed Tomography Perfusion Imaging of the Brain

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Policy Number: 448
BCBSA Reference Number: 6.01.49

Related Policies
None

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue℠ and Medicare PPO Blue℠ Members

CT-based perfusion imaging of the brain is **INVESTIGATIONAL** for all indications including the diagnosis and management of acute cerebral ischemia (stroke).

Prior Authorization Information

Commercial Members: Managed Care (HMO and POS)
This is **NOT** a covered service.

Commercial Members: PPO, and Indemnity
This is **NOT** a covered service.

Medicare Members: HMO Blue℠
This is **NOT** a covered service.

Medicare Members: PPO Blue℠
This is **NOT** a covered service.

CPT Codes / HCPCS Codes / ICD-9 Codes

The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.
Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tbody>
<tr>
<td>0042T</td>
<td>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</td>
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Description

Perfusion imaging using computed tomography (CT) provides an assessment of cerebral blood flow that may assist in the identification of ischemic regions of the brain. This technology is proposed as a method to aid treatment decisions in patients being evaluated for acute ischemic stroke, subarachnoid hemorrhage, cerebral vasospasm, brain tumors, and head trauma.

Summary

Computed tomography (CT) perfusion appears to hold promise for improving care of patients with various neurologic conditions. One of the potential areas of benefit is the potential for greater individualization of therapy for acute stroke by better defining ischemic areas at risk that may benefit from thrombolysis. However, the current evidence is insufficient to determine whether outcomes are improved with use of this technique. Randomized clinical trials are needed in which a strategy employing CT perfusion in the treatment of acute stroke is compared with traditional strategies. For other indications such as subarachnoid hemorrhage and brain tumors, the data on CT perfusion are limited. Because the impact of CT perfusion imaging on clinical outcomes is not known, this technique is considered investigational.

Policy History

<table>
<thead>
<tr>
<th>Date</th>
<th>Action</th>
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<tbody>
<tr>
<td>1/2012</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
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<tr>
<td>7/2010</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
<tr>
<td>7/2009</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
<tr>
<td>5/2008</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
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Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References