Medical Policy

Computer-Aided Detection in Conjunction with Digitized Screen-Film Mammography or Full-Field Digital Mammography

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Policy Number: 495
BCBSA Reference Number: 6.01.39A

Related Policies
None

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Computer-aided detection devices as an adjunct to single-reader interpretation of digitized screen-film mammograms may be considered MEDICALLY NECESSARY.

Computer-aided detection devices as an adjunct to single-reader interpretation of direct, full-field digital mammography may be considered MEDICALLY NECESSARY.

Prior Authorization Information
Commercial Members: Managed Care (HMO and POS)
Prior authorization is NOT required.

Commercial Members: PPO, and Indemnity
Prior authorization is NOT required.

Medicare Members: HMO BlueSM
Prior authorization is NOT required.

Medicare Members: PPO BlueSM
Prior authorization is NOT required.
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>77051</td>
<td>Computer-assisted detection (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation, with or without digitization of film radiographic images; diagnostic mammography. (List separately in addition to code for primary procedure)</td>
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<tr>
<td>77052</td>
<td>Computer-assisted detection (computer algorithm analysis of digital image data for lesion detection) with further physician review for interpretation, with or without digitization of film radiographic images; screening mammography (List separately in addition to code for primary procedure)</td>
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<tr>
<td>77055</td>
<td>Mammography; unilateral</td>
</tr>
<tr>
<td>77056</td>
<td>Mammography; bilateral</td>
</tr>
<tr>
<td>77057</td>
<td>Screening mammography, bilateral (2 view film study of each breast)</td>
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HCPCS Codes

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<tr>
<th>HCPCS codes:</th>
<th>Code Description</th>
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<tr>
<td>G0202</td>
<td>Screening mammography, producing direct digital image, bilateral, all views</td>
</tr>
<tr>
<td>G0204</td>
<td>Diagnostic mammography, producing direct digital image, bilateral, all views</td>
</tr>
<tr>
<td>G0206</td>
<td>Diagnostic mammography, producing direct digital image, unilateral, all views</td>
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Description

Computer-aided detection (CAD) has been suggested as an adjunct to screening mammograms to decrease errors in perception, i.e., failure to see an abnormality. The use of CAD systems requires a digital image, either generated by digitization of a prior screen-film mammogram (SFM) (digitized mammogram), or generated directly (direct full-field digital mammogram- FFDM). The effectiveness of CAD needs to be evaluated separately for these two types of digital images.

Commercially available CAD systems use computerized algorithms for identifying suspicious regions of interest on the digital image. The locations of the abnormalities are marked such that the reader can then reference the same areas in the original mammogram for further review. The intent of CAD is to aid in detection of potential abnormalities for the radiologist to re-review. The radiologist, not CAD, makes the diagnosis if a clinically significant abnormality exists and whether future diagnostic evaluation is warranted.

Examples of CAD systems for use with mammography include the R2 ImageChecker from Hologic, the Second Look from Cadx Medical Systems and the Kodak Mammography CAD Engine from Eastman Kodak. All CAD systems for use with mammography are considered investigational regardless of the commercial name, the manufacturer or FDA approval status except when used for the medically necessary indications that are consistent with the policy statement.
Summary
The available evidence suggests that the use of CAD as an adjunct to the radiologist’s interpretation of screen-film mammography improves net health outcomes compared with single reader radiologist interpretations by increasing true positive rate without a disproportionate increase in the false positive rate. In summary, accumulated evidence affirms the policy statement that CAD as an adjunct to single-reader interpretation of digitized SFM is medically necessary.

There is a paucity of data comparing full field digital mammography without CAD to full field digital mammography with CAD. It is important to separately study the clinical effectiveness of CAD systems as applied in full-field mammography and not to generalize results of CAD in screen-film mammography. While there is insufficient evidence to permit conclusions on the effect on health outcomes of using CAD as an adjunct to the radiologists’ interpretation of full-field digital mammography, local expert opinion supported its use and so it may be considered medically necessary.

Policy History

<table>
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<tr>
<th>Date</th>
<th>Action</th>
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<tr>
<td>11/2009</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
</tr>
<tr>
<td>8/2007</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
2. 2006 TEC Assessment: Computer-aided Detection (CAD) with Full-Field Digital Mammography.

Endnotes
1. Based on exert local opinion.