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Medical Policy Optical Coherence Tomography for Imaging of Coronary Arteries

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BCBSÅ Reference Number: 2.02.29A (For Plan internal use only) NCD/LCD: N/A

Related Policies

Anterior Eye Segment Optical Imaging, #084

Policy

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

Optical coherence tomography is considered **INVESTIGATIONAL** when used as an adjunct to percutaneous coronary interventions with stenting.

Optical coherence tomography is considered **INVESTIGATIONAL** in all other situations, including but not limited to, risk stratification of intracoronary atherosclerotic plaques and follow-up evaluation of stenting.

Prior Authorization Information

Inpatient

 For services described in this policy, precertification/preauthorization <u>IS REQUIRED</u> for all products if the procedure is performed <u>inpatient</u>.

Outpatient

 For services described in this policy, see below for products where prior authorization <u>might be</u> <u>required</u> if the procedure is performed <u>outpatient</u>.

| | Outpatient |
|---------------------------------------|---------------------------------------|
| Commercial Managed Care (HMO and POS) | This is not a covered service. |
| Commercial PPO and Indemnity | This is not a covered service. |
| Medicare HMO Blue sM | This is not a covered service. |
| Medicare PPO Blue SM | This is not a covered service. |

CPT Codes / HCPCS Codes / ICD Codes

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

There is no specific CPT code for this service.

Description

Optical coherence tomography (OCT) is an imaging technique that uses near-infrared light to image the coronary arteries. Potential applications in cardiology include evaluating the characteristics of coronary artery plaques for the purpose of risk stratification and following coronary stenting to determine the success of the procedure.

Summary

Optical coherence tomography (OCT) is an imaging technique that has some advantages over intravascular ultrasound (IVUS) for imaging coronary arteries. It has a higher resolution and provides images with greater detail for accessible structures compared to IVUS. Case series have demonstrated that OCT can be performed with a high success rate and few complications. Head-to-head comparisons of OCT and IVUS report that OCT picks up additional abnormalities that are not detected by IVUS, implying that OCT is a more sensitive test compared to IVUS.

As an adjunct to PCI, OCT may improve upon the ability to pick up abnormalities compared to IVUS, and this may lead to changes in management. However, the current evidence is limited and includes relatively small numbers of patients who have received OCT. As a result, it is not possible to determine the degree of improvement with OCT, or the clinical significance of this improvement. Therefore, the use of OCT as an adjunct to PCI is considered investigational.

For the indications of risk stratification of coronary plaques and follow-up of stenting, OCT may also be more accurate than IVUS for imaging of superficial structures. However, the clinical utility of IVUS has not been demonstrated for these indications, since test results do not lead to changes in management that improve outcomes. Therefore, clinical utility has not been demonstrated for OCT for the same reasons. As a result, OCT is considered investigational for risk stratification of coronary plaques and for follow-up post-stent implantation.

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| Date | Action |
| 11/2022 | Annual policy review. Policy updated with literature review through October 2022. References added. Policy statements unchanged. |
| 2/2020 | Policy updated with literature review through February 1, 2020, references added. Policy statements unchanged. |
| 1/2017 | Clarified coding information for the 2017 code changes. |
| 3/2015 | Annual policy review. New references added. |
| 5/2014 | Annual policy review. New references added. |
| 2/2013 | New policy describing non-coverage. Effective 02/04/13 |
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Policy History

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

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