**Payment Policy |** Computerized Ophthalmic Imaging for Glaucoma

**EFFECTIVE DATE:** 12/04/2007
**POLICY LAST UPDATED:** 12/04/2007

## OVERVIEW

This payment policy documents coverage of Computerized Ophthalmic Imaging for Glaucoma, which is typically used for patients with mild or moderate glaucomatous damage or those who are glaucoma suspect as described below. **While computerized ophthalmic imaging is also used for other conditions this policy only addresses its use for the detection and monitoring of glaucoma.**

## PRIOR AUTHORIZATION

Prior authorization is not required.

## POLICY STATEMENT

**BlueCHiP for Medicare and Commercial products**

Computerized scanning ophthalmic diagnostic imaging for glaucoma is covered.

## MEDICAL CRITERIA

Not Applicable

## BACKGROUND

Scanning laser ophthalmoscopy and scanning laser polarimetry are techniques used to diagnose and evaluate glaucoma. Glaucoma is a disease characterized by degeneration of the optic disc. Elevated intraocular pressure has long been thought to be the primary cause, but the relationship between intraocular pressure and optic nerve damage varies among patients suggesting a multifactorial origin. The association between glaucoma and other vascular disorders, such as diabetes and hypertension, suggest vascular factors may play a role in glaucoma. Screening for glaucoma is difficult because of its asymptomatic nature and lack of easily objective criteria for diagnosis in its early stages.

Conventional management of the patient with glaucoma involves drug therapy to control intraocular pressures and serial evaluation of the optic nerve and retinal fiber layer to detect glaucomatous changes. Standard evaluation techniques include direct examination of the optic nerve using the ophthalmoscope or stereophotography, visual fields, and fundus photography. There has been interest in developing more objective, reproducible techniques both to document optic nerve damage and to detect early changes in the optic nerve and nerve fiber layer before the development of permanent visual field deficits.

Scanning laser ophthalmoscopy is a laser-based image acquisition, which is intended to improve the quality of the examination compared to standard ophthalmologic examination. A laser is scanned across the retina along with a detector system. Only a single spot on the retina is illuminated at any time, resulting in a high-contrast image of great reproducibility. In addition, these techniques do not require maximal mydriasis, which may be a problem in patients with glaucoma. The TopSS (Topographic Scanning System) device is probably the most common example of this technology.

Scanning laser polarimetry is another technique used in evaluating glaucoma. While examination of the optic nerve head is considered the "gold standard," assessment of the thickness of the surrounding retinal nerve fiber layer (NFL) has been investigated as a way of identifying early glaucomatous change. In scanning laser

polarimetry a scanning laser ophthalmoscope is coupled with a polarimeter, which indirectly measures the NFL thickness by measuring the rotation of a polarized laser beam reflected from the retina. The Nerve Fiber Analyzer is an example of this technology.

Computerized ophthalmic diagnostic testing is typically used for those patients with mild or moderate glaucomatous damage or those who are **glaucoma suspect** defined as having at least one of the following symptoms documented in their medical record either as currently presenting with or a history of:

- intraocular pressure > or equal to 22mm Hg
- cup to disc ratio > or equal to 0.4 with family history of glaucoma or risk of low tension glaucoma
- documented increase of cup to disc ratio > or equal to 0.5
- focal notch with rim/disc > or equal to 0.2
- disc hemorrhage
- optic disc abnormality
- field defect

## COVERAGE

Benefits may vary by group/contract. Please refer to the appropriate Evidence of Coverage or Subscriber Agreement for applicable diagnostic testing benefits/coverage.

## CODING

**BlueCHiP for Medicare and Commercial**

**92133**
**92134**

## RELATED POLICIES

None

## PUBLISHED

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| Provider Update | Mar 2011 |
| Policy Update | Oct 2001 |
| Policy Update | Oct 1999 |

## REFERENCES

None

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