ANTERIOR EYE SEGMENT
SCANNING COMPUTERIZED IMAGING

Description: The classification of glaucoma (primary open-angle or angle-closure) relies heavily on knowledge of the anterior segment anatomy, particularly that of the anterior chamber angle. Angle-closure glaucoma is characterized by obstruction of aqueous fluid drainage through the trabecular meshwork from the eye's anterior chamber. The width of the angle is one factor affecting the drainage of aqueous humor. A wide unobstructed iridocorneal angle allows sufficient drainage of aqueous humor, whereas a narrow angle may impede the drainage system and leave the patient susceptible to angle-closure glaucoma. Slit lamp biomicroscopy is used to evaluate the anterior chamber. However, the chamber angle can only be examined with specialized lenses, the most common of these being the gonioscopic mirror. In this procedure a gonio lens is applied to the surface of the cornea after administration of a topical anesthetic, and the image is magnified with the slit lamp. Gonioscopy is the standard method for clinically assessing the anterior chamber angle.

Other techniques for imaging the anterior eye segment include ultrasonography and optical coherence tomography (OCT). Ultrasonography uses high-frequency mechanical pulses to build up a picture of the front of the eye. An ultrasound scan along the optical axis assesses corneal thickness, anterior chamber depth, lens thickness, and axial length. As with gonioscopy, this technique requires placement of a probe after use of a topical anesthetic.

Optical coherence tomography is a non-invasive method that creates an image of light reflected from the ocular structures. In this technique a reflected light beam interacts with a reference light beam. The coherent (positive) interference between the 2 beams (reflected and reference) is measured by an interferometer, allowing construction of an image of the ocular structures. The Stratus OCT™ (Carl Zeiss Meditec), is designed for evaluating the optic nerve head, retinal nerve
fiber layer, and retinal thickness. The Zeiss Visante OCT is designed for imaging and measurement of ocular structures in the anterior segment, such as corneal and LASIK flap thickness. An early application of OCT technology was the evaluation of the cornea before and after refractive surgery. Optical coherence tomography has been proposed as a rapid diagnostic and screening tool for the detection of angle closure in glaucoma.

**Policy:**
Anterior eye segment optical imaging using scanning computerized ophthalmic imaging, such as optical coherence tomography, is considered **INVESTIGATIVE** due to the lack of clinical evidence demonstrating its impact on improved health outcomes.

**Coverage:**
Blue Cross and Blue Shield of Minnesota medical policies apply generally to all Blue Cross and Blue Plus plans and products. Benefit plans vary in coverage and some plans may not provide coverage for certain services addressed in the medical policies.

Medicaid products and some self-insured plans may have additional policies and prior authorization requirements. Receipt of benefits is subject to all terms and conditions of the member’s summary plan description (SPD). As applicable, review the provisions relating to a specific coverage determination, including exclusions and limitations. Blue Cross reserves the right to revise, update and/or add to its medical policies at any time without notice.

For Medicare NCD and/or Medicare LCD, please consult CMS or National Government Services websites.

Refer to the Pre-Certification/Pre-Authorization section of the Medical Behavioral Health Policy Manual for the full list of services, procedures, prescription drugs, and medical devices that require Pre-certification/Pre-Authorization. Note that services with specific coverage criteria may be reviewed retrospectively to determine if criteria are being met. Retrospective denial of claims may result if criteria are not met.

**Coding:**
The following codes are included below for informational purposes only, and are subject to change without notice. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement.

**CPT:**
92132 Scanning computerized ophthalmic diagnostic imaging, anterior segment, with interpretation and report, unilateral or bilateral

**Policy History:**
Developed February 3, 2008

Most recent history:
Reviewed January 12, 2011