



# CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.

**Subject Vitrectomy Chair/Vitrectomy Support System/Face-Down Positioning Device**

**Effective Date ..... 12/15/2008**  
**Next Review Date.....9/15/2009**  
**Coverage Policy Number .....0173**

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## Hyperlink to Related Coverage Policies

### INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2008 CIGNA

## Coverage Policy

Coverage for a vitrectomy chair/vitrectomy support system/face-down positioning device is subject to the terms, conditions and limitations of the applicable benefit plan's Durable Medical Equipment (DME) benefit and schedule of copayments. In addition, a vitrectomy chair/vitrectomy support system/face-down positioning device is specifically excluded under some benefit plans. Please refer to the applicable benefit plan document to determine benefit availability and the terms, conditions and limitations of coverage. Under many benefit plans, coverage for DME is limited to the lowest-cost alternative.

If coverage for a vitrectomy chair/vitrectomy support system/face-down positioning device is available, the following conditions of coverage apply.

CIGNA covers a vitrectomy chair/vitrectomy support system/face-down positioning device when the individual is required to maintain a face-down position following a vitrectomy.

Coverage is generally limited to rental of the support system.

## General Background

The vitrectomy chair/vitrectomy support system is designed for use by patients who have undergone vitrectomy surgery and require postoperative, face-down positioning for one day to three weeks. Indications for vitrectomy include: detached retina, vitreous hemorrhage, macular pucker, macular edema, diabetic retinopathy, and trauma. Macular hole repair is the most common indication. Success rates of 90% have been reported with the use of face-down positioning following macular hole repair. Without face-down positioning or in cases of poor compliance to positioning, success rates have been reported to be as low as 60%.

A vitrectomy is the surgical removal of the vitreous humor (i.e., the clear aqueous gel that fills the space between the lens and the retina), and is performed to clear blood and debris from the eye, to remove scar tissue, or to alleviate traction on the retina. The retinal surgeon performs a vitrectomy through a microscope and special lense designed to provide a clear image of the back of the eye. Once the vitreous is removed and the defect is repaired, the emptied cavity is instilled with a bubble consisting of gas, air, saline solution or silicone oil. Since the macula and retina are located at the back of the eye, recovering patients may be instructed to maintain a face-down position in order for the bubble to effectively apply pressure to the area to enhance healing. This pressure allows the macula or retina to re-bond to the eye wall and, ideally, a new vitreous forms and replaces the bubble. Although some regimens may vary, face-down positioning is a widely accepted clinical practice following a vitrectomy. The use and duration of face-down positioning may be dependant upon the type of material instilled into the vitreous cavity and physician practice. Face-down positioning is typically required for 7-10 days, however durations as short as 24 hours and as long as three weeks have been reported.

### **Literature Review**

Although the studies supporting the effectiveness of face-down positioning are primarily in the form of small population comparative trials and retrospective reviews with heterogeneous patient populations (n=10–70), better outcomes were reported with face-down posturing following the procedure. Most studies used the face-down positioning following macular hole repair, and the length of time spent in posturing varied from 24 hours to ten days. Outcomes included: improved visual acuity, stable vision, anatomical closure, and development of less severe and/or slower progression of cataract development postoperatively. Studies compared face-down posturing to no posturing or modified posturing. Some studies compared variable posturing times (e.g., seven days vs. three days), and overall, there were no significant differences in outcomes based upon the time spent in postoperative posturing (Merkur and Tull, 2007; Tranos, et al., 2007; Wickens and Shah, 2006; Tranos, et al., 2006; Krohn, 2005; Verma, et al., 2002).

In 2008, Guillaubey et al. conducted a two-center randomized controlled trial (n=140 patients/150 eyes) that compared postoperative vitrectomy seated positioning (P0) (n=72 eyes) to face-down positioning (P1 group) (n=78 eyes). Follow-up ranged from six to 25 months. Sixty-three P0 patients compared to 76 P1 patients experienced idiopathic macular hole sealing (p=0.27). Mean visual acuity improved in the P0 (p=0.006) and the P1 group (p=0.027). The anatomic success rate in patients who were engaged in face-down positioning (97.4%) compared to seated positioning (87.5%) was statistically significant (p=0.027). A retrospective analysis based on the size of the macular hole (< 400 micrometers [ $\mu\text{m}$ ] vs. > 400  $\mu\text{m}$ ) revealed no significant difference in anatomic success between the two groups. However, in individuals with a > 400  $\mu\text{m}$  hole, the overall anatomic success rate was 87.5% in P0 individuals compared to 95.1% in P1 individuals (p=0.45). Author-noted limitations of the study included the use of different tamponade gases and the fact that nearly half the vitrectomies were performed in combination with cataract surgery.

### **Professional Societies/Organizations**

In their discussion of diagnosis and management of macular hole, the National Eye Institute (NEI) states that maintaining a face-down position following surgery is crucial to the success of the surgery, and if a patient cannot remain in a face-down position following repair, vision recovery may not be successful. They also state that the individuals “who are unable to remain in a face-down position for this length of time may not be good candidates for a vitrectomy” (NEI, 2008).

In their discussion of the treatment of idiopathic macular hole, the American Academy of Ophthalmology (AAO) states that the physician’s instructions to the patient should include the need for special patient positioning postoperatively. They also state that “there is no strong evidence for the effect on outcome of the choice of gas tamponade or duration of face-down positioning” (2003).

### **Summary**

Face-down positioning systems are commonly used and widely accepted as a method to assist individuals in maintaining a face-down position following vitrectomy, allowing the affected eye to heal. The safety and effectiveness of these devices are supported in textbooks, the peer-reviewed literature and by professional societies.

## Coding/Billing Information

**Note:** This list of codes may not be all-inclusive.

**Covered when medically necessary:**

CPT <sup>®*</sup> Codes	Description
	No specific code

HCPCS Codes	Description
E1399 <sup>†</sup>	Durable medical equipment, miscellaneous

<sup>†</sup> **Note:** Covered when used to report vitrectomy chair/vitrectomy support system/face-down positioning device and stated medically necessity criteria are met.

ICD-9-CM Diagnosis Codes	Description
361.00- 361.07	Retinal detachment with retinal defect
361.2	Serous retinal detachment
361.81- 361.89	Other forms of retinal detachment
362.01- 362.06	Diabetic retinopathy
362.07	Diabetic macular edema
362.42	Serous detachment of retinal pigment epithelium
362.43	Hemorrhagic detachment of retinal pigment epithelium
362.53	Cystoid macular degeneration of retina
362.54	Macular cyst, hole, or pseudohole
362.56	Macular puckering
362.83	Retinal edema
379.23	Vitreous hemorrhage

\*Current Procedural Terminology (CPT<sup>®</sup>) © 2007 American Medical Association: Chicago, IL.

## References

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## Policy History

<b>Pre-Merger Organizations</b>	<b>Last Review Date</b>	<b>Policy Number</b>	<b>Title</b>
CIGNA HealthCare	9/15/2008	0173	Vitrectomy Chair/Vitrectomy Support System/Face-Down Positioning Device

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Connecticut General Life Insurance Company has acquired the business of Great-West Healthcare from Great-West Life & Annuity Insurance Company (GWLA). Certain products continue to be provided by GWLA (Life, Accident and Disability, and Excess Loss). GWLA is not licensed to do business in New York. In New York, these products are sold by GWLA's subsidiary, First Great-West Life & Annuity Insurance Company, White Plains, N.Y.