MEDICAL POLICY

Medical Policy Title	**Vitrectomy Chair/Face-down Positioning System**
Policy Number	**1.01.52**
Current Effective Date	April 17, 2025
Next Review Date	April 2026

Our medical policies are based on the assessment of evidence based, peer-reviewed literature, and professional guidelines. Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract. (Link to Product Disclaimer)

POLICY STATEMENT(S)

Use of a vitrectomy chair or face-down support system is considered **medically appropriate** following vitrectomy surgery, if a face-down position is required.

RELATED POLICIES

Not Applicable

POLICY GUIDELINE(S)

I. The member's subscriber contract or rider thereto must provide coverage for durable medical equipment.

II. Benefits for a vitrectomy chair/face-down support system are provided through rental only.

DESCRIPTION

A vitrectomy is the surgical removal of the vitreous humor and is performed to clear blood and debris from the eye, to remove scar tissue, or to alleviate traction on the retina. At the completion of the surgery, gas or silicone oil may be injected into the eye, creating a bubble for retinal tamponade in order to keep the retina in place. As the retina is located in the back of the eye, recovering patients may be required to maintain a face-down position in order for the bubble to effectively apply pressure to the area, to enhance healing. The pressure allows the retina to re-bond with the eye wall, while new vitreous forms and replaces the bubble. Common indications for vitrectomy include macular hole repair, detached retina, vitreous hemorrhage, macular pucker, macular edema, diabetic retinopathy, and trauma.

A vitrectomy chair or face-down support system is designed for use by patients who have undergone vitrectomy surgery and assists with maintaining the face-down positioning requirement. Some patients may require the position for only a day, while others may have to maintain several hours daily of a face-down position for as long as three weeks.

SUPPORTIVE LITERATURE

A face-down vitrectomy system can assist in the maintenance of a face-down position, postoperatively, for those patients whose surgeon has recommended the device. Many patients are

more readily able to comply with the strict positioning requirements when utilizing the device. Some studies have demonstrated better outcomes in healing utilizing face-down positioning.

Hu Z, et al. (2016) conducted a meta-analysis of four (4) randomized control trials (RCTs) comprising 251 cases which concluded that no-face-down positioning had similar results to face-down positioning for holes smaller than 400 μm, but face-down positioning may be beneficial for holes larger than 400 μm.

Another meta-analysis (Ye 2019) of five (5) randomized controlled trials composed of a total of 183 eyes in the face down positioning group (FDP) and 175 eyes in the non-face down positioning (nFDP) group which studied the closure rate of macular holes (MH) following surgery. Statistical meta-analysis revealed that the overall MH closure rate in the FDP group was significantly higher than that in the nFDP group (OR = 2.27, 95% CI: 1.02 to 5.05, P = 0.04). For MH sizes smaller than 400 μm, the subgroup meta-analysis indicated that the closure rate of the FDP group was not significantly higher than that of the nFDP group (OR = 1.32, 95% CI: 0.39 to 4.49, P = 0.66). However, when MH size was larger than 400 μm, there was a significantly higher closure rate in the FDP group (OR = 2.95, 95% CI: 1.10 to 7.94, P = 0.03). The authors concluded that the meta-analysis provides evidence that a face-down postoperative position seems to be unnecessary when MHs are smaller than 400 μm but may be highly recommended for MHs larger than 400 μm.

A Cochrane review (Cundy 2023) included eight (8) randomized controlled trials (RCTs), comprised of 709 eyes (699 participants) total, in which postoperative face-down positioning was compared to no face-down positioning following surgery for macular holes. The primary outcome of interest was closure of the macular hole. The primary outcome of successful anatomical hole closure at one to six months following surgery was reported in 95 of every 100 eyes of participants advised to position face-down for at least three days after surgery, and in 85 of every 100 eyes of participants not advised to position face-down (RR 1.05, 95% CI 0.99 to 1.12, 709 eyes, 8 studies, I^2 = 44%). Amongst the 327 eyes of participants with macular holes of at least 400 μm, hole closure was noted in 94 of every 100 eyes of participants advised to position face-down, and in 84 of every 100 eyes of participants not advised to position face-down (RR 1.08, 95% CI 0.93 to 1.26, 5 studies, I^2 = 62%). Amongst the 129 eyes of participants with macular holes of less than 400 μm, hole closure was noted in 100 of every 100 eyes of participants advised to position face-down, and in 96 of every 100 eyes of participants not advised to position face-down (RR 1.03, CI 0.97 to 1.11, 4 studies, I^2 = 0%). The included studies were not all directly comparable due to differences in the surgical techniques used and the durations of postoperative positioning advised.

PROFESSIONAL GUIDELINE(S)

The American Academy of Ophthalmology (AAO) preferred practice pattern for idiopathic macular hole (2024) state in the early days of macular hole surgery, patients were instructed to maintain a face-down position for 10 to 14 days postoperatively to optimize macular hole closure. Postoperative prone positioning is uncomfortable for the patient, even though immobilization is not required. In some patients, positioning may be extremely difficult or even lead to pressure sores or neuropathy. Studies have reported excellent results using face-down positioning for 1 to 3 days. Longer positioning may be required for holes larger than 400 μm or those with inadequate tamponade.

Extended duration of face-down positioning minimizes the risk of cataract progression and provides some tamponade of the macular hole.

REGULATORY STATUS

Not Applicable

CODE(S)

- Codes may not be covered under all circumstances.
- Code list may not be all inclusive (AMA and CMS code updates may occur more frequently than policy updates).
- (E/I)=Experimental/Investigational
- (NMN)=Not medically necessary/appropriate

CPT Codes

Code	Description
	There is no specific CPT code

HCPCS Codes

Code	Description
	There is no specific HCPCS code; E1399 (durable medical equipment, miscellaneous) may be billed.

ICD10 Codes

Code	Description
E10.311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11.311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E10.319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E11.319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E10.329	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E11.329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema

Code	Description
E10.339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E11.339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E10.349	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E11.349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E10.359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E11.359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema
H33.001-H33.009	Unspecified retinal detachment with retinal break (code range)
H33.011-H33.019	Retinal detachment with single break (code range)
H33.021-H33.029	Retinal detachment with multiple breaks (code range)
H33.031-H33.039	Retinal detachment with giant retinal tear (code range)
H33.041-H33.049	Retinal detachment with retinal dialysis (code range)
H33.051-H33.059	Total retinal detachment (code range)
H33.20-H33.23	Serous retinal detachment (code range)
H33.40-H33.43	Traction detachment of retina (code range)
H33.8	Other retinal detachments
H35.351-H35.359	Cystoid macular degeneration (code range)

Code	Description
H35.371-H35.379	Puckering of macula (code range)
H35.721-H35.729	Serous detachment of retinal pigment epithelium (code range)
H35.731-H35.739	Hemorrhagic detachment of retinal pigment epithelium (code range)
H35.81	Retinal edema
H43.10-H43.13	Vitreous hemorrhage (code range)

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SEARCH TERMS

Face-down Support System, Vitrectomy Chair, Vitrectomy Recovery Solutions, Vitrectomy Solution Day Timer System Seat, Comfort Solutions, Day Timer Face Down Chair, NightTimer Face-Support System

CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)

Based upon our review, a vitrectomy chair/face-down support system is not addressed in National or Regional Medicare coverage determinations or policies.

PRODUCT DISCLAIMER

- Services are contract dependent; if a product does not cover a service, medical policy criteria do not apply.
- If a commercial product (including an Essential Plan or Child Health Plus product) covers a specific service, medical policy criteria apply to the benefit.
- If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.
- If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.
- If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY HISTORY/REVISION

Committee Approval Dates

04/23/15, 04/28/16, 04/27/17, 04/26/18, 04/25/19, 04/16/20, 04/22/21, 04/21/22, 04/20/23, 04/18/24, 04/17/25

Date	Summary of Changes
04/17/25	• Annual review, policy intent unchanged, supporting literature and professional guidelines updated.
01/01/25	• Summary of changes tracking implemented.
04/24/14	• Original effective date