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Reimbursement for Contrast Sensitivity Testing

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Reimbursement for Contrast Sensitivity Testing

by

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Objective: *This report is provided as a general discussion of reimbursement for contrast sensitivity testing and related issues. Local variations between carriers may occur which are not described here. The user is strongly encouraged to review official instructions promulgated by the Centers for Medicare and Medicaid (CMS), and their Medicare carriers; this document is not an official source nor is it a complete guide on all matters pertaining to reimbursement. In addition, users should check with their local insurance carriers for approved diagnosis codes and usage guidelines for the services discussed.*

This discussion is intended to assist the reader to better understand the rules and regulations regarding reimbursement for diagnostic testing of contrast sensitivity. However, the responsibility for appropriate usage, adequate documentation, and proper coding are always the physician's.

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INTRODUCTION

This monograph describes reimbursement for contrast sensitivity (CS) testing. At this time, eye care professionals can perform this test using a variety of target types. The content of this document will address specifically charts using linear sine-wave gratings as with the Functional Acuity Contrast Test[®] (FACT[®]). Stereo Optical's Functional Vision Analyzer[™] is a self-calibrating instrument incorporating the FACT charts.

Much of the information is taken from official publications of the Medicare program. However, the reader is strongly encouraged to check with the local carrier for additional information and instructions. In the case of other third party payers, we have used the coding concepts contained in CPT and published by the American Medical Association. Documentation of the procedure is a key part of reimbursement, so we describe the required elements in detail.

CONTRAST SENSITIVITY (CS) TESTING

CS testing refers to the ability of the visual system to distinguish between an object and its background. For example, imagine a black cat on a white snowy background (high contrast) versus a white cat on a white snowy background (low contrast).

Figure 1 **High Contrast Cat**



Figure 2 **Low Contrast Cat**



Many people may be able to read the 20/20 line on the Snellen visual acuity chart (Figure 3), oftentimes because Snellen uses high contrast. This indicates that they have normal visual acuity, yet they feel that the quality of their vision is poor. The Snellen test is not sensitive enough to detect reductions in the *quality* of vision, which is functional vision. In all conditions where visual acuity is reduced, CS is reduced as well. However, sometimes CS is reduced more than expected based upon the visual acuity alone. This means that if only visual acuity is tested, the visual disability of the person with relatively reduced CS will be underestimated. CS testing provides a more comprehensive assessment of everyday vision.

Figure 3 **Snellen Chart**

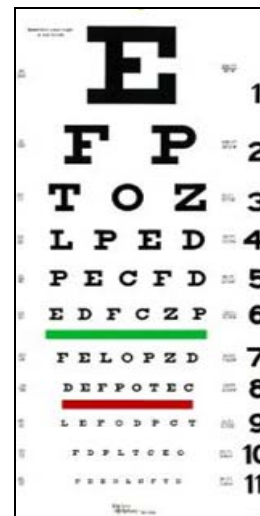


Figure 4A Snellen Chart Without Cataract



Figure 4B Snellen Chart With Cataract



Figure 5A Bright Daylight Without Cataract



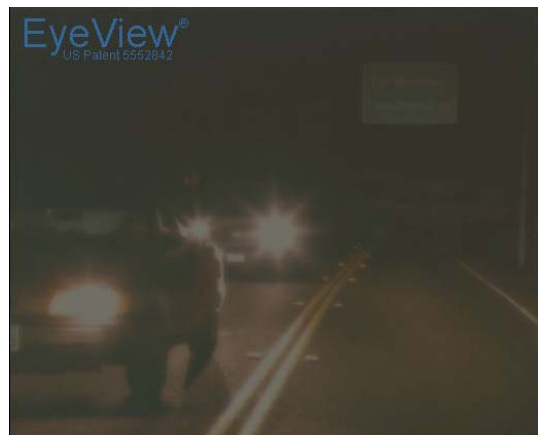
Figure 5B Bright Daylight With Cataract



Figure 6A Night Driving Without Cataract



Figure 6B Night Driving With Cataract



Using a computer generated model, Figure 4A shows a Snellen chart for a patient with normal contrast sensitivity, while Figure 4B illustrates the effect of cataract even though BCVA is 20/30. Often patients with substantial functional disability can still read the letters on a Snellen chart. Figures 5A and 5B provide the same comparison under daylight conditions, and Figures 6A and 6B illustrate night conditions. In all three instances, there is a significant difference in the quality of vision even though BCVA is the same in all cases.

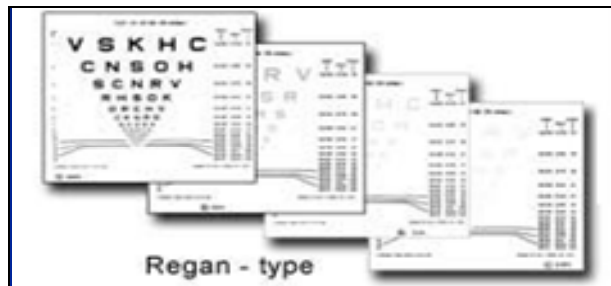
Contrast sensitivity is tested by viewing targets of varying contrast and size (spatial frequency) to relate to how well a person functions visually and their ability to see everyday objects. Several contrast test systems are available; the key difference is target type. For example, the Pelli-Robson chart (Figure 7) determines the contrast required to read large letters of a fixed size. With the Pelli-Robson chart, the contrast varies while the letter size remains constant.

Figure 7 **Pelli-Robson Chart**



The Regan chart (Figure 8), a low-contrast letter chart having different size letters, reduces the contrast levels of a standard Snellen chart, resulting in several charts.

Figure 8 **Regan Chart**



The Functional Acuity Contrast Test (FACT) uses linear sine-wave gratings (Figure 9), which measure specific visual channels. Research shows that the contrast sensitivity curve provided by sine-wave grating tests is more sensitive and informative than the results obtained from low-contrast letter acuity systems. Stereo Optical's Functional Vision Analyzer employs linear sine-wave gratings precisely presented under strictly controlled background illumination levels and glare levels.

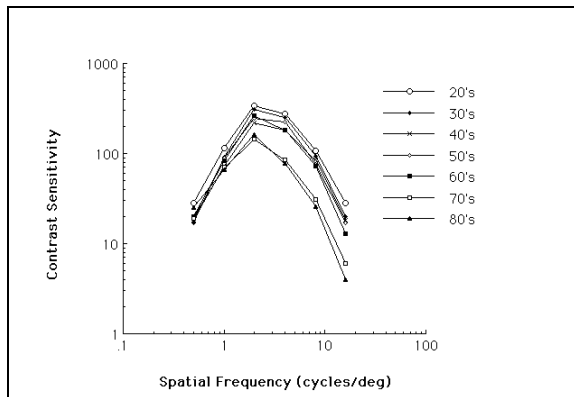
Figure 9 **Sine-wave Grating**



The findings of CS testing are presented as a contrast sensitivity function (CSF) that represents two variables – size and contrast – while Snellen visual acuity tests are a function of size alone. The CS test determines the patient's contrast detection threshold, the lowest contrast at which a pattern can be seen. The higher the contrast sensitivity, the lower the contrast level at which an object can be seen. Some typical CSF's are depicted in Figure 10 for various age

groups. Note the characteristic inverted-U shape of the CSF and its logarithmic axes.

Figure 10 CSF of 7 Age Groups
(after Schieber, 1992)



THE INSTRUMENT

The Functional Vision Analyzer is a self-calibrating instrument incorporating the FACT CS test. Combined with EyeView[®] software, the Functional Vision Analyzer is a diagnostic tool for ophthalmologists and optometrists to test functional vision and evaluate visual quality under precisely controlled conditions. The Functional Vision Analyzer is the only device to meet ANSI standards, which is a significant factor for the clinical research market.



INDICATIONS FOR USE

CS testing is useful as an auxiliary means of assessing visual difficulties in patients who test

well with a traditional Snellen chart. A Snellen chart employs high contrast (*i.e.*, black letters on a white background). Many people can read the 20/20 line yet still complain of visual difficulties, such as driving at night (*i.e.*, low contrast conditions). This may be due to optical aberrations of the visual system, contact lens problems, ocular pathology, complications related to medications, and ocular manifestations of systemic diseases.

Indications for contrast sensitivity can vary according to the disease. Contrast sensitivity testing may be performed for the following conditions:

- Optical aberrations of the visual system
- Contact lens problems
- Ocular pathology (*e.g.*, AMD, cataract, diabetic retinopathy, glaucoma)
- Complications related to medications
- Ocular manifestations of systemic disease (*e.g.*, MS, AIDS)
- Refractive surgery

The standard Snellen letter chart used by most vision clinics is not effective in the early detection of diseases such as cataracts and glaucoma. Contrast sensitivity testing can provide the clinician with a more detailed assessment of the patient's everyday visual function.

Contrast sensitivity testing has become an important factor to consider with the introduction of new intraocular lenses such as presbyopia-correcting IOLs. Contrast sensitivity levels can affect the type of lens a cataract surgeon selects. Certain lenses can adversely affect the patient's level of contrast sensitivity. The wrong lens choice can make the quality of vision worse following cataract surgery. A patient can have 20/20 postoperative Snellen visual acuity and still be unhappy. A greater understanding of a patient's vision in various conditions is crucial when making decisions that could affect surgical outcomes.

There are no specific guidelines for repeat CS testing; the decision should be based on medical necessity. In general, if a patient experiences a decrease in the quality of vision, the physician should repeat CS testing.

BILLING ISSUES

CS Testing is an incidental part of an eye examination¹, consultation, or visual function screening; no separate CPT code describes the test. There are a host of other diagnostic tests defined in this same fashion, including: keratometry, lensometry, PAM, and Schirmers testing. Do not use 92499 (*unlisted ophthalmological service*) to unbundle CS testing from the remainder of the office visit unless instructed to do so by a payer. Instead, only charge for the evaluation and management service (992xx), general ophthalmological service (920xx), or screening (99172).

CPT 99172 describes visual function screening. Screening is useful for identifying risk as part of preventative care or routine eye care, and does not presuppose an abnormal condition or pathology. CS testing is valuable in this context as a sensitive measure of visual performance, particularly for federally mandated occupational health services. Medicare does not cover visual function screening.

Payment for CS testing depends on whether it is part of a covered or non-covered service. Covered services are indicated for pathology or abnormalities, while non-covered services include screening or routine eye care. Non-covered services are billed to the patient; covered services are billed to the health plan.

Pre-cataract Evaluation

The scope and timing of the exam where the decision for cataract surgery is made determines the level of service for this important office visit.

¹ Cahaba Mississippi local policy for General Ophthalmology Services (L5759)

While most ophthalmologists select a comprehensive eye exam (CPT 92004 or 92014) to report the examination prior to the initial cataract surgery, those codes may undervalue this service.

The extent of the medical history, the duration of the patient counseling, the number of ancillary tests (such as CS testing), and the gravity of the decision making, may all support a higher level of service with correspondingly greater reimbursement. A more representative and realistic code selection would be CPT 99204 or 99215. With proper documentation, an ophthalmologist can often justify the higher level of service suggested above and enjoy the commensurate higher reimbursement of about \$20-30.

Medical Necessity for Cataract Surgery

Cataracts usually develop slowly and cataract surgery is rarely an emergency (*e.g.*, phacolytic glaucoma). So, in most cases, the surgery is an elective procedure and can be scheduled at the patient's convenience when the symptoms create sufficient difficulties in the normal activities of daily living. The patient and the surgeon make the decision for surgery together after certain criteria are met. The criteria include all of the following points:

- Poor vision – best corrected visual acuity is 20/50 or worse. Alternately, the patients BCVA is 20/40 or worse and complains of significant difficulty with glare (confirmed with Brightness Acuity Testing at a low or medium setting, or by means of another suitable test). CS testing will provide an accurate, and more meaningful, assessment of the quality of the patient's vision. The policies of some Medicare carriers² explicitly recognize the value of additional diagnostic testing of CS. Check your local policies for further instructions on this point.

² Palmetto GBA, LCD Cataract Surgery, L13915, 9/13/2006

- Dysfunction – the patient cannot perform the activities of daily living such as reading, driving, sports, etc.
- Diagnosis – there is objective evidence of cataract that is causing poor vision
- Prognosis – there is good probability that removing the cataract will restore vision and allow the patient to resume the activities of daily living
- Health – the patient can withstand the stress of cataract surgery and the associated anesthesia
- Awareness – the patient can appreciate the proposed surgery

An exception exists for those cases where the removal of the cataract is performed to permit treatment of retinal disease and improving vision and functionality is not the primary objective.

CS Testing and Refractive Cataract Surgery

With the advent of presbyopia-correcting IOLs and refractive surgical procedures concurrent with cataract removal, ophthalmic surgeons can help restore vision for patients with cataracts and lessen their dependence on eyeglasses following surgery. The decision to add a refractive component to the conventional cataract surgery rests with the patient and the surgeon.

Most payers, including Medicare, have agreed to allow the surgeon to charge the beneficiary for a non-covered assortment of ancillary services that constitute extended care. Contrast sensitivity testing is an ancillary service when its purpose is to assist the physician in choosing the appropriate presbyopia-correcting IOL. A poor selection can lead to unsatisfactory outcomes and “20/20 unhappy” patients.

Postoperative Care

CS testing may be part of postoperative care, particularly where the clinician is trying to assess the reason for patient dissatisfaction where best corrected visual acuity is 20/20. As such, postop

office visits that include CS testing are part of the global surgery package and no separate charge applies.

The same rules apply when a co-management agreement is in place between two doctors. If the co-managing doctor chooses to perform CS testing as an incidental component of the post-operative exam, he or she must follow global surgical rules. If the eye exam is unrelated to the postop care, the service may be billed and the appropriate code should be appended with modifier 24. If it is non-covered, such as routine eye care or screening, services are billed to the patient.

Reimbursement Pitfalls

At the present time, there is no Medicare National Coverage Determination (NCD) that addresses CS testing. Consequently, CMS defers to the local Medicare carriers to establish coverage and payment policies for this diagnostic test. While no carrier devotes a local coverage determination (LCD) policy exclusively to CS testing, it is sometimes mentioned in another context, such as cataract surgery. No Medicare policy provides for separate reimbursement of CS testing. Either the test is considered part of an eye exam or consultation, or it is treated as an element of screening and non-covered.

Physicians are often tempted to treat all professional services in an *a la carte* fashion, especially where a discrete instrument is involved such as the Functional Vision Analyzer. We urge you to resist this temptation where CS testing is concerned. In particular, when CS testing is performed as part of a covered office visit, do not attempt to unbundle this service so that the beneficiary is forced to pay for it by means of an Advance Beneficiary Notice (ABN).

ORDERS & INTERPRETATIONS

All diagnostic tests require a physician’s order; that’s particularly true for any test that is

“incident to” the services of the physician, such as CS testing. It is usually noted as part of the plan in the medical record along with the medical rationale for the test. It may be a notation as simple as “*CS testing today to assess quality of vision*”.

The utility of a diagnostic test depends on the physician’s interpretation and associated chart notation. A lengthy or dictated report is not required. Interpretation of a diagnostic test includes:

- An assessment of the reliability of the test
- The results of the test, including noteworthy findings (if any)
- Implications of the test, including diagnosis (if possible)
- The impact of the test results on the patient’s treatment and/or prognosis (if any)
- Physician’s signature

An interpretation can be written on a separate page in the medical record, or as a discrete entry together with other evaluation and management services. Figure 11 is a sample form that may be used for interpreting diagnostic tests.

Figure 11 Interpretation Report For Diagnostic Tests

<u>INTERPRETATION REPORT</u>	
Test _____	<input type="checkbox"/> OU <input type="checkbox"/> OD <input type="checkbox"/> OS
Technician Comments:	
Date Performed _____	Performed By: _____
Reliability: _____	
Patient Understanding & Cooperation: _____	
Physician Interpretation:	
Test Findings: _____	
Diagnosis: _____	
Plan: _____	

Ordering Physician Signature & Date	

SUPERVISION

For services that are considered “incident to” an office visit, *direct supervision* is required. Direct supervision in the office setting means the physician must be present in the office suite and immediately available to furnish assistance and direction throughout the performance of the procedure. It does not mean that the physician must be present in the room when the procedure is performed.

CONCLUSION

CS testing can provide the ophthalmologist or optometrist with detailed information about a patient’s functional vision far beyond what can be obtained with standard Snellen visual acuity measurements. The additional information from CS testing is useful in the diagnosis and management of a wide variety of diseases, abnormalities, and therapeutic options. CS testing is particularly valuable to the ophthalmic surgeon where cataract and refractive surgery are contemplated. Clinical trials have adopted CS testing as an integral component of vision testing.

CS testing is considered part of an eye exam. As such, it is covered or non-covered in that context. For example, vision screening and routine eye care is usually not covered by Medicare or most health plans, although it is often covered by vision plans. Evaluation and management of disease is generally covered. While there is no National Coverage Determination (NCD) for CS testing there are some local Medicare policies (LCDs). No Medicare policy provides for separate reimbursement of CS testing.

This discussion is meant to assist the reader to better understand the rules and regulations regarding reimbursement for testing with CS, however the responsibility for appropriate usage, adequate documentation and proper coding are always the physician’s.

