American Medical Association (AMA)-convened
Physician Consortium for Performance Improvement® (PCPI®)
American Academy of Ophthalmology

Eye Care I and II
Performance Measurement Sets

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Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA)-convened Physician Consortium for Performance Improvement® (PCPI®). These Measures are not clinical guidelines and do not establish a standard of medical care, and have not been tested for all potential applications.

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Eye Care I measures

Eye Care I
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* The composition and affiliations of the work group members are listed as originally convened in 2006 and are not up to date

Intended Audience, Care Setting, and Patient Population

Any ophthalmologist or optometrist caring for patients aged 18 years and older with primary open-angle glaucoma, age-related macular degeneration and diabetic retinopathy.

These clinical performance measures are designed for individual quality improvement. All of the measures may also be appropriate for accountability if appropriate sample sizes and implementation rules are achieved.

Eye Care I Measures*

Primary Open-Angle Glaucoma

Measure #1: Optic Nerve Evaluation

Age-related Macular Degeneration

Measure #3: Dilated Macular Examination
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Diabetic Retinopathy

Measure #7: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Measure #8: Communications with the Physician Managing the Ongoing Diabetes Care

Eye Care I Retired or Revised Measures

Measure #2: Age-related Macular Degeneration: Antioxidant Supplement Prescribed/Recommended
This measure has been revised and was included in the Eye Care II measures, now titled, Counseling on Antioxidant Supplements. The newly revised measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document

Measure #4: Cataracts: Assessment of Visual Functional Status measure has been retired.

Measure #5: Cataracts: Documentation of Pre-surgical Axial Length, Corneal Power Measurement, and
Measure #6: Cataracts: Method of Intraocular Lens Power Calculation and Pre-surgical Dilated Fundus Evaluation were revised into a bundled measure. *The bundled measure, now titled Comprehensive Pre-operative Assessment for Cataract Surgery with Intraocular (IOL) Placement, is stewarded by the American Academy of Ophthalmology. It has been removed from this document.*

*The Eye Care I and II measures were developed by separate work groups and thus appear in separate sections of this document

Eye Care I Measures Testing

The AMA-convened PCPI collaborated on several measure testing projects in 2012, 2013 and 2015 to *ensure* the Primary Open-Angle Glaucoma Optic Nerve Evaluation, Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema and Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care measures are reliable and evaluated for accuracy of the measure numerator, denominator and exception case identification. The testing projects were conducted utilizing electronic health record data and registry data. Parallel forms reliability and signal-to-noise reliability was tested.

Two sites participated in the parallel forms testing of the Primary Open-Angle Glaucoma measure. Site A was a physician-owned multi-location suburban practice in a large Midwestern city with four providers. Site B was a physician-owned multi-location practice with three providers.

One site participated in the parallel forms testing of the Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema measure and Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care measure. Site A was a physician-owned private practice with one ophthalmologist.

Signal-to-noise reliability was assessed using 2013 data acquired from the Centers for Medicare & Medicaid Services Physician Quality Reporting System Group Practice Reporting Option (GPRO) database.

Measures Tested

- Primary Open-Angle Glaucoma – Optic Nerve Evaluation
- Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema
- Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from electronic health records were used to calculate parallel forms reliability for the measures and data acquired from the GPRO database were used to perform signal-to-noise reliability for the measures.

Signal-to-Noise Reliability Testing

Reliability is the ratio of the physician-to-physician variance divided by the sum of the physician-to-physician variance plus the error variance specific to a physician. A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in physician performance.

Primary Open-Angle Glaucoma – Optic Nerve Evaluation

Parallel Forms Reliability Testing (Site A and Site B)

There were 146 observations from two sites used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 146 observations that were initially selected, 146 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.84 demonstrates almost perfect agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)
Denominator: 146, 60.3%, 0.00 (Non-Calculable, Non-Calculable)*
Numerator: 146, 93.8%, 0.84 (0.73-0.94)
Exception: 146, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)**

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

**This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, the Kappa can be significantly reduced (http://www.ajronline.org/cgi/content/full/184/5/1391).

Signal-to-Noise Reliability Testing
Reliability is the ratio of the physician-to-physician variance divided by the sum of the physician-to-physician variance plus the error variance specific to a physician. A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in physician performance.Reliability testing was performed by using a beta-binomial model. The beta-binomial model assumes the physician performance score is a binomial random variable conditional on the physician's true value that comes from the beta distribution. The beta distribution is usually defined by two parameters, alpha and beta. Alpha and beta can be thought of as intermediate calculations to get to the needed variance estimates.

Reliability is estimated at two different points, at the minimum number of quality reporting events for the measure and at the mean number of quality reporting events per physician.

For this measure, the reliability at the minimum level of quality reporting events (10) was 0.72. The average number of quality reporting events for physicians included is 121.8. The reliability at the average number of quality reporting events was 0.97.

This measure has moderate reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Diabetic Retinopathy – Documentation of Presence or Absence of Macular Edema

Parallel Forms Reliability Testing (Site A)
There were 155 observations from one site used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 155 observations that were initially selected, 155 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.76 demonstrates substantial agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)
Denominator: 155, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)**
Numerator: 155, 96.1%, 0.76 (0.58, 0.95)
Exception: 155, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)**

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

**This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, the Kappa can be significantly reduced (http://www.ajronline.org/cgi/content/full/184/5/1391).

Signal-to-Noise Reliability Testing
For this measure, the reliability at the minimum level of quality reporting events (10) was 0.86. The average number of quality reporting events for physicians included is 76.8. The reliability at the average number of quality reporting events was 0.98.

This measure has high reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Diabetic Retinopathy – Communication with the Physician Managing Ongoing Diabetes Care

Parallel Forms Reliability Testing (Site A)
There were 155 observations from one site used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 155 observations that were initially selected, 155 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.52 demonstrates moderate agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)
Denominator: 155, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)**
Numerator: 155, 89.7%, 0.52 (0.32, 0.73)
Exception: 155, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)**

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

**This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, the Kappa can be significantly reduced (http://www.ajronline.org/cgi/content/full/184/5/1391).

Signal-to-Noise Reliability Testing

For this measure, the reliability at the minimum level of quality reporting events (10) was 0.82. The average number of quality reporting events for physicians included is 80.7. The reliability at the average number of quality reporting events was 0.97.

This measure has high reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Eye Care I

Measure #1: Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation

Measure Description

Percentage of patients aged 18 years and older with a diagnosis of primary open-angle glaucoma (POAG) who have an optic nerve head evaluation during one or more office visits within 12 months

Measure Components

Numerator Statement	Patients who have an optic nerve head evaluation during one or more office visits within 12 months
Denominator Statement	All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma
Denominator Exclusions	None
Denominator Exceptions	Documentation of medical reason(s) for not performing an optic nerve head evaluation
Supporting Guidelines	The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure: Ophthalmic Evaluation[1] In completing the elements in the comprehensive adult medical eye evaluation, the ophthalmic evaluation specifically focuses on the following elements: History [A:III] Visual acuity measurement [A:III] Pupil examination [B:II] Anterior segment examination [A:III] Intraocular pressure measurement [A:I] Gonioscopy [A:III] Optic nerve head and retinal nerve fiber layer examination [A:III] Fundus examination [A:III)

Measure Importance

Relationship to desired outcome	Changes in the optic nerve are one of two characteristics which currently define progression and thus worsening of glaucoma disease status (the other characteristic is visual field). There is a significant gap in documentation patterns of the optic nerve for both initial and follow-up care[2] even among specialists[3]. Examination of the optic nerve head and retinal nerve fiber layer provides valuable structural information about glaucomatous optic nerve damage. Visible structural alterations of the optic nerve head or retinal nerve fiber layer and

	development of peripapillary choroidal atrophy frequently occur before visual field defects can be detected. Careful study of the optic disc neural rim for small hemorrhages is important, since these hemorrhages can precede visual field loss and further optic nerve damage.
Opportunity for Improvement	Studies have been undertaken to examine variations in patterns of care for patients with POAG although there are limited studies specific to the examination of an optic nerve head. A 2003 study[1] describes current patterns of care for POAG with a focus on processes of care highlighted within the Academy of Ophthalmology's (AAO) Preferred Practice Patterns. The AAO recommends the preferred technique for optic nerve head and retinal nerve fiber layer evaluation including magnified stereoscopic visualization (as with the slit-lamp biomicroscope).For this study, information was obtained on processes of care, clinical findings, and treatments related to initial evaluations for POAG and to subsequent evaluations by an eye care provider (ophthalmologist or optometrist) during the study period. Information obtained included whether an evaluation of the optic disc and nerve fiber layer and a photograph or drawing of the optic nerve head were performed at or up to 12 months before or 6 months after the first visit and whether a target IOP level was specified at the first visit. Information for follow-up visits included whether IOP and slit-lamp examinations were performed. At initial evaluation, 92% of patients received a slit-lamp examination, 93% received an evaluation of the optic disc or nerve fiber layer but only 53% received an optic nerve head photograph or drawing. 1% of patients had a target IOP level specified or documented. At follow-up visits about 97% of patients had an IOP checked but only 82% had a slit-lamp examination.

Measure Designation

Measure purpose	Accountability Quality Improvement
Type of measure	Process
Level of Measurement	Clinician: Individual Clinician: Group/Practice
Care setting	Ambulatory Care: Clinician Office/Clinic Post Acute/Long Term Care Facility
Data source	Electronic health record Registry Administrative Claims

Measures #2 –#6 have been removed from this document

Age-related Macular Degeneration

Measure #2: Age-related Macular Degeneration: Antioxidant Supplement Prescribed/Recommended Measure has been revised and was included in the Eye Care II measures, now titled, Counseling on Antioxidant Supplements. The newly revised measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document

Measure #3: Dilated Macular Examination
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document

Cataracts

Measure #4: Cataracts: Assessment of Visual Functional Status measure has been retired.

Measure #5: Cataracts: Documentation of Pre-surgical Axial Length, Corneal Power Measurement, and **Measure #6:** Cataracts: Method of Intraocular Lens Power Calculation and Pre-surgical Dilated Fundus Evaluation
Measures 5 and 6 were revised into a bundled measure. The bundled measure, now titled Comprehensive Pre-operative Assessment for Cataract Surgery with Intraocular (IOL) Placement, is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Measures Transitioned to the American Academy of Ophthalmology (AAO)

The Eye Care measures transitioned to AAO are available at**: http://www.aao.org/pqrs**

All AAO measure inquires may sent to: irisregistry@aao.org

Eye Care I

Measure #7: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Measure Description

Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy and the presence or absence of macular edema during one or more office visits within 12 months

Measure Components

Numerator Statement	Patients who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy AND the presence or absence of macular edema during one or more office visits within 12 months Documentation - The medical record must include: documentation of the level of severity of retinopathy AND documentation of whether macular edema was present or absent Macular Edema - Acceptable synonyms for macular edema include: macular thickening, intraretinal thickening, serous detachment of the retina, or pigment epithelial detachment Severity of Retinopathy - Mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative
Denominator Statement	All patients aged 18 years and older with a diagnosis of diabetic retinopathy
Denominator Exclusions	None
Denominator Exceptions	Documentation of medical reason(s) for not performing a dilated macular or fundus examination Documentation of patient reason(s) for not performing a dilated macular or fundus examination
Supporting Guidelines	The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure: Because treatment is effective in reducing the risk of visual loss, detailed examination is indicated to assess for the following features that often lead to visual impairment: presence of macular edema, optic nerve neovascularization and/or neovascularization elsewhere, signs of severe NPDR (extensive retinal hemorrhages/microaneurysms, venous beading, and IRMA), and vitreous or preretinal hemorrhage. (Good evidence; Strong recommendation)[4]

Measure Importance

Relationship to desired outcome	Diabetic retinopathy is a leading cause of new cases of legal blindness among working-age Americans and represents a leading cause of blindness in this age group worldwide.[5] Ensuring timely treatment that could prevent blindness due to diabetes requires the performance and documentation of key examination parameters. The documented level of severity of retinopathy and the documented presence or absence of macular edema assists with the on-going plan of care for the patient with diabetic retinopathy
Opportunity for Improvement	Rates of eye examinations for elderly persons with DM or frequently occurring eye diseases, especially for DM, remain far below recommended levels in a nationally representative sample of persons with health insurance coverage.[6] Several factors, including limited physical and cognitive function and greater distance to an ophthalmologist, but not health insurance coverage, account for variation in regular use. Although effective treatment is available, fewer patients with diabetes are referred by their primary care physicians for ophthalmic care than would be expected according to guidelines by the American Diabetes Association and the American Academy of Ophthalmology.[7] In two community-based studies, 43% to 65% of participants had not received a dilated eye examination at the time of enrollment.[8]

Measure Designation

Measure purpose	Accountability Quality Improvement
Type of measure	Process
Level of Measurement	Clinician: Individual Clinician: Group/Practice
Care setting	Ambulatory Care: Clinician Office/Clinic Post Acute/Long Term Care Facility: Nursing Home/Skilled Nursing Facility Post Acute/Long Term Care Facility: Inpatient
Data source	Electronic health record Registry Administrative Claims

Eye Care I

Measure #8: Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care

Measure Description

Percentage of patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed with documented communication to the physician who manages the ongoing care of the patient with diabetes mellitus regarding the findings of the macular or fundus exam at least once within 12 months

Measure Components

Numerator Statement	Patients with documentation, at least once within 12 months, of the findings of the dilated macular or fundus exam via communication to the physician who manages the patient's diabetic care Definition: Communication - May include documentation in the medical record indicating that the findings of the dilated macular or fundus exam were communicated (eg, verbally, by letter) with the clinician managing the patient's diabetic care OR a copy of a letter in the medical record to the clinician managing the patient's diabetic care outlining the findings of the dilated macular or fundus exam. Findings - Includes level of severity of retinopathy (eg, mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema.
Denominator Statement	All patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed.
Denominator Exclusions	None
Denominator Exceptions	Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes Documentation of patient reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes
Supporting Guidelines	The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure: Ophthalmologists should communicate the ophthalmologic findings and level of retinopathy with the primary care physician as well as the need for optimizing metabolic control. (Good evidence; Strong recommendation) [4]

Measure Importance

Relationship to desired outcome	The primary care physician that manages the ongoing care of the patient with diabetes should be aware of the patient's dilated eye examination and severity of retinopathy to manage the ongoing diabetes care. Such communication is important in assisting the physician to better manage the diabetes. Several studies have shown that better management of diabetes is directly related to lower rates of development of diabetic eye disease (Diabetes Control and Complications Trial -DCCT, UK Prospective Diabetes Study - UKPDS).
Opportunity for Improvement	In general, communication between specialists and primary care physicians is lacking. A number of studies have assessed the adequacy of information transfer between the referring provider and the specialist and noted a significant lack of effective communication transfer.[9] In more than half the referrals in the studies reviewed, the referring provider had no communication with the specialist. [10-12] Up to 45 percent of referrals resulted in no communication from the specialist back to the referring provider. [10-14] A 2009 survey by O'Malley and Cunningham found that 80.6% of specialists said they "always" or "most of the time" send the referring PCP notification of the results of their consultation and advice to patients, whereas only 62.2% of PCPs reported they received such information.[15] Patient surveys also identify problems with information transfer. For example, approximately one-quarter of U.S. patients reported that the results and records from one provider did not reach another provider in time for their appointment.[16,17] Even though all physicians highly value communication between referring providers and specialists[18] both primary care physicians and specialists cite the lack of effective information transfer as one of the greatest problems in the referral process.[11]

Measure Designation

Measure purpose	Accountability Quality Improvement
Type of measure	Process
Level of Measurement	Clinician: Individual Clinician: Group/Practice
Care setting	Ambulatory Care: Clinician Office/Clinic Post Acute/Long Term Care Facility
Data source	Electronic health record Registry Administrative Claims

Evidence Classification/Rating Schemes

AAO Level Definitions
Level A, defined as most important
Level B, defined as moderately important
Level C, defined as relevant but not critical

Level I includes evidence obtained from at least one properly conducted, well-designed, randomized, controlled trial. It could include meta-analyses of randomized controlled trials.
Level II includes evidence obtained from the following:
- Well-designed controlled trials without randomization,
- Well-designed cohort or case-control analytic studies, preferably from more than one center,
- Multiple-time series with or without the intervention

Level III includes evidence obtained from one of the following:
- Descriptive studies,
- Case reports,
- Reports of expert committees/organization,
- Expert opinion (e.g., Preferred Practice Patterns panel consensus)

References

[1] American Academy of Ophthalmology Glaucoma Panel. Preferred Practice Pattern Guidelines. Primary Open-Angle Glaucoma. San Francisco, CA: American Academy of Ophthalmology; 2010.
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APPENDIX A

Eye Care I Performance Measurement Specifications

Coding Reviewed and Updated: August, 2015

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Eye Care I

Measure #1: Primary Open-Angle Glaucoma (POAG): Optic Nerve Evaluation

A. Administrative Claims/Registry Specifications

Denominator (Eligible Population)	All patients aged 18 years and older with a diagnosis of primary open-angle glaucoma Age >= 18 years **AND** CPT® Code for Encounter: 92002, 92004, 92012, 92014, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 **AND** Diagnosis for primary open-angle glaucoma (ICD-9-CM) [for use through 9/30/2015]: 365.10, 365.11, 365.12, 365.15 Diagnosis for primary open-angle glaucoma (ICD-10-CM) [for use beginning 10/1/2015]: H40.10X0, H40.10X1, H40.10X2, H40.10X3, H40.10X4, H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4, H40.1210, H40.1211, H40.1212, H40.1213, H40.1214, H40.1220, H40.1221, H40.1222, H40.1223, H40.1224, H40.1230, H40.1231, H40.1232, H40.1233, H40.1234, H40.1290, H40.1291, H40.1292, H40.1293, H40.1294, H40.151, H40.152, H40.153, H40.159
Denominator Exclusions	None
Numerator	Patients who have an optic nerve head evaluation during one or more office visits within 12 months **Report CPT Category II code:** 2027F: Optic nerve head evaluation performed
Denominator Exceptions	Documentation of medical reason(s) for not performing an optic nerve head evaluation **Append modifier to CPT Category II code:** 2027F-1P: Documentation of medical reason(s) for not performing an optic nerve head evaluation

B. Electronic Health Record Specifications

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eCQM Library and view the most recent publishing:
http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/

Eye Care I

Measure #7: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

A. Registry Specifications

Denominator (Eligible Population)	All patients aged 18 years and older with a diagnosis of diabetic retinopathy Age >= 18 years **AND** CPT® Code for Encounter: 92002, 92004, 92012, 92014, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 **AND** Diagnosis for diabetic retinopathy (ICD-9-CM) [for use through 9/30/2015]: 362.01, 362.02, 362.03, 362.04, 362.05, 362.06 Diagnosis for diabetic retinopathy (ICD-10-CM) [for use beginning 10/1/2015]: E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359
Denominator Exclusions	None
Numerator	Patients who had a dilated macular or fundus exam performed which included documentation of the level of severity of retinopathy AND the presence or absence of macular edema during one or more office visits within 12 months **Definitions:** Documentation - The medical record must include: documentation of the level of severity of retinopathy AND documentation of whether macular edema was present or absent Macular Edema - Acceptable synonyms for macular edema include: macular thickening, intraretinal thickening, serous detachment of the retina, or pigment epithelial detachment Severity of Retinopathy - Mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative **Report CPT Category II code:** 2021F: Dilated macular or fundus exam performed, including documentation of the presence or absence of macular edema AND level of severity of retinopathy

Denominator Exceptions	Documentation of medical reason(s) for not performing a dilated macular or fundus examination Documentation of patient reason(s) for not performing a dilated macular or fundus examination **Append modifier to CPT Category II code:** 2021F-1P: Documentation of medical reason(s) for not performing a dilated macular or fundus examination 2021F-2P: Documentation of patient reason(s) for not performing a dilated macular or fundus examination

B. Electronic Health Record Specifications

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eCQM Library and view the most recent publishing:
http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/

Eye Care I

Measure #8: Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care

A. Administrative Claims/Registry Specifications

Denominator (Eligible Population)	All patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed Age >= 18 years **AND** CPT® Code for Encounter: 92002, 92004, 92012, 92014, 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337 **AND** Diagnosis for diabetic retinopathy (ICD-9-CM) [for use through 9/30/2015]: 362.01, 362.02, 362.03, 362.04, 362.05, 362.06 Diagnosis for diabetic retinopathy (ICD-10-CM) [for use beginning 10/1/2015]: E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359 **AND** **Report Quality-Data Code (QDC): G8397:** Dilated macular or fundus exam performed, including documentation of the presence or absence of macular edema AND level of severity of retinopathy
Denominator Exclusions	None
Numerator	Patients with documentation, at least once within 12 months, of the findings of the dilated macular or fundus exam via communication to the physician who manages the patient's diabetic care **Definitions:** Communication - May include documentation in the medical record indicating that the findings of the dilated macular or fundus exam were communicated (eg, verbally, by letter) with the clinician managing the patient's diabetic care OR a copy of a letter in the medical record to the clinician managing the patient's diabetic care outlining the findings of the dilated macular or fundus exam. Findings - Includes level of severity of retinopathy (eg, mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema.

	Report CPT Category II code: 5010F: Findings of dilated macular or fundus exam communicated to the physician or other qualified health care professional managing the diabetes care
Denominator Exceptions	Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes Documentation of patient reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes **Append modifier to CPT Category II code:** 5010F-1P: Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes 5010F-2P: Documentation of patient reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician who manages the ongoing care of the patient with diabetes

B. Electronic Health Record Specifications

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http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/

Eye Care II measures

Eye Care II
Measure Development Work Group

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* The composition and affiliations of the work group members are listed as originally convened in 2006 and are not up to date

Intended Audience, Care Setting, and Patient Population

Ophthalmologists and optometrists may implement these measures if and when they provide the care addressed in the measures. The measures are designed for calculating reporting or performance measurement at the individual level.

These clinical performance measures are designed for individual quality improvement. All of the measures may also be appropriate for accountability if appropriate sample sizes and implementation rules are achieved. The proposed measures seek to advance performance measures for eye care by 1) including explicit measures of intermediate outcomes of care; 2) incorporating issues of patient safety and monitoring of care; and 3) enhancing the patient-provider relationship in care so as to more directly connect process measures to issues of patient interest, satisfaction, and empowerment.

Eye Care II Measures*

Primary Open-Angle Glaucoma

Measure #1: Primary Open-Angle Glaucoma (POAG): Reduction of Intraocular Pressure by 15% or Documentation of a Plan of Care
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Measure #2: Primary Open-Angle Glaucoma (POAG): Counseling on Glaucoma
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Cataracts

Measure #3: Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures

Measure #4: Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery

Measure#6: Cataracts: Comprehensive Pre-operative Assessment for Cataract Surgery with Intraocular (IOL) Placement.
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Age-related Macular Degeneration

Measure #7: Age-related Macular Degeneration (AMD): Counseling on Antioxidant Supplements
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

*The Eye Care I and II measures were developed by separate work groups and thus appear in separate sections of this document

Eye Care II Measures Testing

The AMA-convened PCPI collaborated on several measure testing projects in 2012 and 2015 to ensure the Cataracts – Complications within 30 Days Following Cataracts Surgery measure and Cataracts – 20/40 or Better Visual Acuity within 90 Days Following Cataracts Surgery measures are reliable and evaluated for accuracy of the measure numerator, denominator and exception case identification. The testing projects were conducted utilizing electronic health record data and registry data. Parallel forms reliability and signal-to-noise reliability were tested. One site participated in the parallel forms testing of the measures. Site A was a physician-owned multi-location suburban practice in a large Midwestern city with four physicians. Signal-to-noise reliability was assessed using 2013 data acquired from the Centers for Medicare & Medicaid Services Physician Quality Reporting System Group Practice Reporting Option (GPRO) database. An analysis of the measure exclusions were conducted using 2013 Medicare 5% Beneficiary claims data.

Measures Tested

- Cataracts – Complications within 30 Days Following Cataracts Surgery
- Cataracts – 20/40 or Better Visual Acuity within 90 Days Following Cataracts Surgery

Reliability Testing

The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Data abstracted from electronic health records were used to calculate parallel forms reliability for the measures, data acquired from the GPRO database were used to perform signal-to-noise reliability and data gathered from the Medicare 5% Beneficiary database were used to inform the analysis of the measure exclusions.

Cataracts – Complications within 30 Days Following Cataracts Surgery

Reliability Testing Results

Parallel Forms Reliability Testing (Site A)

There were 149 observations from one site used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 149 observations that were initially selected, 149 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.00 demonstrates poor agreement between the automated report and reviewer. However, upon further review of the testing results, it was determined that the low kappa score results from the limitation of the kappa statistic where while the agreement can be 90% or greater, if one classification category dominates, the kappa can be significantly reduced.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)

Denominator: 149, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)*

Numerator: 149, 99.3%, 0.00 (-0.02, 0.00)**

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

**This is an example of the limitation of the Kappa statistic. While the agreement can be 90% or greater, if one classification category dominates, the kappa can be significantly reduced (http://www.ajronline.org/cgi/content/full/184/5/1391).

Signal-to-Noise Reliability Testing
Reliability is the ratio of the physician-to-physician variance divided by the sum of the physician-to-physician variance plus the error variance specific to a physician. A reliability of zero implies that all the variability in a measure is attributable to measurement error. A reliability of one implies that all the variability is attributable to real differences in physician performance.

Reliability testing was performed by using a beta-binomial model. The beta-binomial model assumes the physician performance score is a binomial random variable conditional on the physician's true value that comes from the beta distribution. The beta distribution is usually defined by two parameters, alpha and beta. Alpha and beta can be thought of as intermediate calculations to get to the needed variance estimates.

Reliability is estimated at two different points, at the minimum number of quality reporting events for the measure and at the mean number of quality reporting events per physician.

For this measure, the reliability at the minimum level of quality reporting events (10) was 0.87. The average number of quality reporting events for physicians included is 53.3. The reliability at the average number of quality reporting events was 0.97.

This measure has high reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Exclusions Analysis
Medicare 5% Beneficiary claims data sample, there were 46,715 unique individuals who had a cataract procedure in the first nine months of 2013 with a total of 70,773 procedures. Using the criteria for the measure, 36,988 (52.2%) procedures had a cataract measure exclusion associated with the procedure.

Cataracts – 20/40 or Better Visual Acuity within 90 Days Following Cataracts Surgery

Parallel Forms Reliability Testing (Site A)
There were 149 observations from one site used for the denominator analysis. The kappa statistic value was found to be non-calculable resulting from the inability to divide-by-zero in the statistic formula when only one response was used.

Of the 149 observations that were initially selected, 149 observations met the criteria for inclusion in the numerator analysis. The kappa statistic value of 0.85 demonstrates almost perfect agreement between the automated report and reviewer.

Reliability: N, % Agreement, Kappa (95% Confidence Interval)
Denominator: 149, 100.0%, Non-Calculable* (Non-Calculable, Non-Calculable)*
Numerator: 149, 92.6%, 0.85 (0.76, 0.93)

*Cannot calculate kappa statistics when only one response (Yes/Yes) was used, as this causes a divide-by-zero error in the statistic formula.

Signal-to-Noise Reliability Testing

For this measure, the reliability at the minimum level of quality reporting events (10) was 0.47. The average number of quality reporting events for physicians included is 55.3. The reliability at the average number of quality reporting events was 0.83.

This measure has poor reliability when evaluated at the minimum level of quality reporting events and high reliability at the average number of quality events.

Exclusions Analysis

Medicare 5% Beneficiary claims data sample, there were 46,715 unique individuals who had a cataract procedure in the first nine months of 2013 with a total of 70,773 procedures. Using the criteria for the measure, 17,735 (25.1%) procedures had a cataract measure exclusion associated with the procedure.

Primary Open-angle Glaucoma

Measure #1: Primary Open-Angle Glaucoma (POAG): Reduction of Intraocular Pressure by 15% or Documentation of a Plan of Care
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Measure #2: Primary Open-Angle Glaucoma (POAG): Counseling on Glaucoma
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Measures Transitioned to the American Academy of Ophthalmology (AAO)

The Eye Care measures transitioned to AAO are available at**: http://www.aao.org/pqrs**

All AAO measure inquires may sent to: irisregistry@aao.org

Eye Care II

Measure #3: Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures

Measure Description

Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and had any of a specified list of surgical procedures in the 30 days following cataract surgery which would indicate the occurrence of any of the following major complications: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence

Measure Components

Numerator Statement	Patients who had one or more specified operative procedures for any of the following major complications within 30 days following cataract surgery: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence
Denominator Statement	All patients aged 18 years and older who had cataract surgery and no significant ocular conditions impacting the surgical complication rate
Denominator Exclusions	Patients with any one of a specified list of significant ocular conditions that impact the surgical complication rate
Denominator Exceptions	None
Supporting Guidelines	The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure: This is an outcome measure. As such, there are no statements in the guideline specific to this measurement topic.

Measure Importance

Relationship to desired outcome	Complications that may result in a permanent loss of vision following cataract surgery are uncommon. This short-term outcome of surgery indicator seeks to identify those complications from surgery that can reasonably be attributed to the surgery and surgeon and which reflect situations which - if untreated - generally result in significant avoidable vision loss that would negatively impact patient functioning. Further, it seeks to reduce surgeon burden and enhance accuracy in reporting by focusing on those significant complications that can be assessed from administrative data alone and which can be captured by the care of another physician or the provision of additional, separately coded, post-operative services. Finally, it focuses on patient safety and monitoring for events that, while hopefully uncommon, can signify important issues in the care being

	provided. For example, the need to reposition or exchange an intraocular lens (IOL) reflects in part "wrong power" IOL placement, a major patient safety issue. In order to achieve these ends, the indicator excludes patients with other known, pre-operative ocular conditions that could impact the likelihood of developing a complication. Based on the results of the Cataract Appropriateness Project at RAND, other published studies, and one analysis performed on a national MCO data base, the exclusion codes would preserve over 2/3 of all cataract surgery cases for analysis. Thus, this provides a "clean" indicator that captures care for the large majority of patients undergoing cataract surgery.
Opportunity for Improvement	The advances in technology and surgical skills over the last 30 years have made cataract surgery much safer and more effective although complications that threaten vision do occur. For example, a study of more than 220,000 Medicare beneficiaries who underwent cataract surgery between 1994 and 2006 found that more than 1,000, or about 0.5%, of patients had at least one severe post-operative complication.[1] In a review, Taban et al found a postoperative rate of endopthalmitis of 0.128%.[2] Additionally, in a review of Medicare claims data between 1994–2006, Stein et al. reported a one-year postoperative rate of retinal detachment of 0.26%.[3] The occurrence of one of these events is associated with a significant potential for vision loss that is otherwise avoidable. With an annual volume of 2.8 million cataract surgeries in the US, a 2% rate would mean that over 36,000 surgeries are accompanied by these complications.

Measure Designation

Measure purpose	Accountability Quality Improvement
Type of measure	Outcome
Level of Measurement	Clinician: Individual Clinician: Group/Practice
Care setting	Ambulatory Care: Clinician Office/Clinic
Data source	Electronic health record Registry

Eye Care II

Measure #4: Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery

Measure Description

Percentage of patients aged 18 years and older with a diagnosis of uncomplicated cataract who had cataract surgery and no significant ocular conditions impacting the visual outcome of surgery and had best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following the cataract surgery

Measure Components

Numerator Statement	Patients who had best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following cataract surgery
Denominator Statement	All patients aged 18 years and older who had cataract surgery
Denominator Exclusions	Patients with significant ocular conditions impacting the visual outcome of surgery
Denominator Exceptions	None
Supporting Guidelines	The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines and represent the evidence base for the measure: This is an outcome measure. As such, there are no statements in the guideline specific to this measurement topic.

Measure Importance

Relationship to desired outcome	The only reason to perform cataract surgery (other than for a limited set of medical indications) is to improve a patient's vision and associated functioning. The use of a 20/40 visual acuity threshold is based on several considerations. First, it is the level for unrestricted operation of a motor vehicle in the US. Second, it has been consistently used by the FDA in its assessment for approval of intraocular lens (IOL) and other vision devices. Third, it is the literature standard to denote success in cataract surgery. Fourth, work by West et al in the Salisbury Eye Study suggests that 20/40 is a useful threshold for 50th percentile functioning for several vision-related tasks. Most patients achieve excellent visual acuity after cataract surgery (20/40 or better). This outcome is achieved consistently through careful attention through the accurate measurement of axial length and corneal power and the appropriate selection of an IOL power calculation formula. As such, it reflects the care and diligence with which the surgery is assessed, planned and executed. Failure to achieve this after surgery in eyes without comorbid ocular conditions

	that would impact the success of the surgery would reflect care that should be assessed for opportunities for improvement. The exclusion of patients with other ocular and systemic conditions known to increase the risk of an adverse outcome reflects the findings of the two published prediction rule papers for cataract surgery outcomes, by Mangione et al and Steinberg et al. In both papers, the presence of comorbid glaucoma and macular degeneration negatively impacted the likelihood of successful outcomes of surgery. Further, as noted in the prior indicator, exclusion of eyes with ocular conditions that could impact the success of the surgery would NOT eliminate the large majority of eyes undergoing surgery while also minimizing the potential adverse selection that might otherwise occur relative to those patients with the most complex situations who might benefit the most from having surgery to maximize their remaining vision.
Opportunity for Improvement	This is an outcome of surgery indicator of direct relevance to patients and referring providers. The available evidence suggests that cataract surgery achieves this in between 86 and 98% of surgeries in eyes without comorbid ocular conditions (this indicator). While small, the volume of cataract surgery in the US of over 2.8 million surgeries suggests that the impact could affect more than 100,000 patients per year. Because of the exclusion of comorbid ocular conditions, one would expect performance on this indicator to be as high as possible, with significantly lower rates suggestive of opportunities for improvement. Cataract surgery successfully restores vision in the majority of people who have the procedure. The ASCRS National Cataract Database reported that at 3 months postoperatively, 85.5% of all patients had a 20/40 or better best-corrected visual acuity, 57.2% of patients had 20/25 or better postoperative best-corrected visual acuity, and 74.6% of patients were within +/- 1.0 D of target spherical equivalent. Based on 5,788 responses, the mean visual function index score at 3 months postoperatively was 70.3% compared with 55.0% preoperatively.[4] Additionally, data from a UK multi-center Cataract National Dataset found a postoperative visual acuity of 6/12 (20/40) or better was achieved for 94.7% of eyes with no co-pathologies and in 79.9% of eyes with one or more co-pathologies.[5] A rate of 85.5-94.7% of patients achieving a 20/40 or better visual acuity in the context of approximately 3 million cataract surgeries in the US annually would mean that between 160,000 to 435,000 individuals would not achieve a 20/40 or better visual acuity which suggests an opportunity for improvement.

Measure Designation

Measure purpose	Accountability Quality Improvement
Type of measure	Outcome
Level of Measurement	Clinician: Individual Clinician: Group/Practice
Care setting	Ambulatory Care: Clinician Office/Clinic
Data source	Electronic health record Registry

Cataracts

Measure #5: Cataracts: Comprehensive Pre-operative Assessment for Cataract Surgery with Intraocular (IOL) Placement.
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Age-related Macular Degeneration

Measure#6: Age-related Macular Degeneration (AMD): Counseling on Antioxidant Supplements
This measure is stewarded by the American Academy of Ophthalmology. It has been removed from this document.

Measures Transitioned to the American Academy of Ophthalmology (AAO)

The Eye Care measures transitioned to AAO are available at: http://www.aao.org/pqrs

All AAO measure inquires may sent to: irisregistry@aao.org

References

[1] American Academy of Ophthalmology. Preferred practice pattern guidelines: cataract in the adult eye. San Francisco, CA: American Academy of Ophthalmology; 2011. Available at www.aao.org/ppp
[2] Taban M, Behrens A, Newcomb RL, et al. Acute endophthalmitis following cataract surgery: a systematic review of the literature. *Arch Ophthalmol.* 2005;123:613–620.
[3] Stein JD, Grossman DS, Mundy KM, et al. Severe adverse events after cataract surgery among medicare beneficiaries. *Ophthalmology*. 2011;118(9):1716–23.
[4] American Academy of Ophthalmology. Preferred practice pattern guidelines: cataract in the adult eye. San Francisco, CA: American Academy of Ophthalmology; 2011.
[5] Jaycock P, Johnston RL, Taylor M, et al. The Cataract National Dataset electronic multi-centre audit of 55567 operations: updating benchmark standards of care in the United Kingdom and internationally. *Eye*. 2009;23:38-49

American Medical Association (AMA)-convened
Physician Consortium for Performance Improvement® (PCPI®)
American Academy of Ophthalmology

APPENDIX B

Eye Care II Performance Measurement Specifications

Coding Reviewed and Updated: August, 2015

Eye Care II

Measure #3: Cataracts: Complications within 30 Days Following Cataract Surgery Requiring Additional Surgical Procedures

A. Registry Specifications

<table>
<tr><td>Denominator (Eligible Population)</td><td>All patients aged 18 years and older who had cataract surgery and no significant ocular conditions impacting the surgical complication rate

Denominator Instructions: Clinicians who indicate modifier 55, postoperative management only OR modifier 56, preoperative management only, will not qualify for this measure.

Age >= 18 years
AND
CPT® Code for cataract procedure: 66840, 66850, 66852, 66920, 66930, 66940, 66982, 66983, 66984</td></tr>
<tr><td>Denominator Exclusions</td><td>Patients with any one of a specified list of significant ocular conditions that impact the surgical complication rate

<table>
<tr><th>Significant Ocular Condition</th><th>Corresponding ICD-9-CM Codes
[for use through 9/30/2015]</th></tr>
<tr><td>Acute and Subacute Iridocyclitis</td><td>364.00, 364.01, 364.02, 364.03, 364.04, 364.05</td></tr>
<tr><td>Adhesions and Disruptions of Iris and Ciliary Body</td><td>364.70, 364.71, 364.72, 364.73, 364.74, 364.75, 364.76, 364.77, 364.81, 364.82, 364.89</td></tr>
<tr><td>Anomalies of Pupillary Function</td><td>379.42</td></tr>
<tr><td>Aphakia and Other Disorders of Lens</td><td>379.32, 379.33, 379.34</td></tr>
<tr><td>Burn Confined to Eye and Adnexa</td><td>940.0, 940.1, 940.2, 940.3, 940.4, 940.5, 940.9</td></tr>
<tr><td>Cataract Secondary to Ocular Disorders</td><td>366.32, 366.33</td></tr>
<tr><td>Cataract, Congenital</td><td>743.30</td></tr>
<tr><td>Cataract, Mature or Hypermature</td><td>366.9</td></tr>
<tr><td>Cataract, Posterior Polar</td><td>743.31</td></tr>
<tr><td>Central Corneal Ulcer</td><td>370.03</td></tr>
<tr><td>Certain Types of Iridocyclitis</td><td>364.21, 364.22, 364.23, 364.24, 364.3</td></tr>
<tr><td>Chronic Iridocyclitis</td><td>364.10, 364.11</td></tr>
<tr><td>Cloudy Cornea</td><td>371.01, 371.02, 371.03, 371.04</td></tr>
<tr><td>Corneal Opacity and Other Disorders of Cornea</td><td>371.00, 371.03, 371.04</td></tr>
<tr><td>Corneal Edema</td><td>371.20, 371.21, 371.22, 371.23, 371.43, 371.44</td></tr>
<tr><td>Cysts of Iris, Ciliary Body, and Anterior Chamber</td><td>364.60, 364.61, 364.62, 364.63, 364.64</td></tr>
<tr><td>Enophthalmos</td><td>376.50, 376.51, 376.52</td></tr>
</table>
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Glaucoma	365.10, 365.11, 365.12, 365.13, 365.14, 365.15, 365.20, 365.21, 365.22, 365.23, 365.24, 365.31, 365.32, 365.51, 365.52, 365.59, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89
Hereditary Corneal Dystrophies	371.50, 371.51, 371.52, 371.53, 371.54, 371.55, 371.56, 371.57, 371.58
High Hyperopia	367.0
Hypotony of Eye	360.30, 360.31, 360.32, 360.33, 360.34
Injury to Optic Nerve and Pathways	950.0, 950.1, 950.2, 950.3, 950.9
Open Wound of Eyeball	871.0, 871.1, 871.2, 871.3, 871.4, 871.5, 871.6, 871.7, 871.9, 921.3
Pathologic Myopia	360.20, 360.21
Posterior Lenticonus	743.36
Prior Pars Plana Vitrectomy	67036, 67039, 67040, 67041, 67042, 67043 (patient with history of this procedure)
Pseudoexfoliation Syndrome	365.52
Retrolental Fibroplasias	362.21
Senile Cataract	366.11
Traumatic Cataract	366.20, 366.21, 366.22, 366.23
Use of Systemic Sympathetic Alpha-1a Antagonist Medication for Treatment of Prostatic Hypertrophy	Patient taking tamsulosin hydrochloride
Uveitis	360.11, 360.12
Vascular Disorders of Iris and Ciliary Body	364.42

Significant Ocular Condition	**Corresponding ICD-10-CM Codes [for use beginning 10/1/2015]**
Acute and Subacute Iridocyclitis	H20.00, H20.011, H20.012, H20.013, H20.019, H20.021, H20.022, H20.023, H20.029, H20.031, H20.032, H20.033, H20.039, H20.041, H20.042, H20.043, H20.049, H20.051, H20.052, H20.053, H20.059
Adhesions and Disruptions of Iris and Ciliary Body	H21.40, H21.41, H21.42, H21.43, H21.501, H21.502, H21.503, H21.509, H21.511, H21.512, H21.513, H21.519, H21.521, H21.522, H21.523, H21.529, H21.531, H21.532, H21.533, H21.539, H21.541, H21.542, H21.543, H21.549, H21.551, H21.552, H21.553, H21.559, H21.561, H21.562, H21.563, H21.569, H21.81, H21.82, H21.89, H22
Anomalies of Pupillary Function	H57.03
Aphakia and Other Disorders of Lens	H27.10, H27.111, H27.112, H27.113, H27.119, H27.121, H27.122, H27.123, H27.129, H27.131, H27.132, H27.133, H27.139
Burn Confined to Eye and Adnexa	T26.00XA, T26.01XA, T26.02XA, T26.10XA, T26.11XA, T26.12XA, T26.20XA, T26.21XA, T26.22XA, T26.30XA, T26.31XA, T26.32XA, T26.40XA, T26.41XA, T26.42XA, T26.50XA, T26.51XA, T26.52XA, T26.60XA, T26.61XA, T26.62XA, T26.70XA, T26.71XA, T26.72XA, T26.80XA, T26.81XA, T26.82XA, T26.90XA, T26.91XA, T26.92XA
Cataract Secondary to Ocular Disorders	H26.211, H26.212, H26.213, H26.219, H26.221, H26.222, H26.223, H26.229
Cataract, Congenital	Q12.0
Cataract, Mature or Hypermature	H26.9
Cataract, Posterior Polar	Q12.0

	Central Corneal Ulcer	H16.011, H16.012, H16.013, H16.019
	Certain Types of Iridocyclitis	H20.20, H20.21, H20.22, H20.23, H20.811, H20.812, H20.813, H20.819, H20.821, H20.822, H20.823, H20.829, H20.9, H40.40X0
	Chronic Iridocyclitis	A18.54, H20.10, H20.11, H20.12, H20.13, H20.9
	Cloudy Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.811, H17.812, H17.813, H17.819, H17.821, H17.822, H17.823, H17.829
	Corneal Opacity and Other Disorders of Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.89, H17.9
	Corneal Edema	H18.10, H18.11, H18.12, H18.13, H18.20, H18.221, H18.222, H18.223, H18.229, H18.231, H18.232, H18.233, H18.239, H18.421, H18.422, H18.423, H18.429, H18.43
	Cysts of Iris, Ciliary Body, and Anterior Chamber	H21.301, H21.302, H21.303, H21.309, H21.311, H21.312, H21.313, H21.319, H21.321, H21.322, H21.323, H21.329, H21.341, H21.342, H21.343, H21.349, H21.351, H21.352, H21.353, H21.359
	Enophthalmos	H05.401, H05.402, H05.403, H05.409, H05.411, H05.412, H05.413, H05.419, H05.421, H05.422, H05.423, H05.429

	Glaucoma	H40.10X0, H40.10X1, H40.10X2, H40.10X3, H40.10X4, H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4, H40.1210, H40.1211, H40.1212, H40.1213, H40.1214, H40.1220, H40.1221, H40.1222, H40.1223, H40.1224, H40.1230, H40.1231, H40.1232, H40.1233, H40.1234, H40.1290, H40.1291, H40.1292, H40.1293, H40.1294, H40.1310, H40.1311, H40.1312, H40.1313, H40.1314, H40.1320, H40.1321, H40.1322, H40.1323, H40.1324, H40.1330, H40.1331, H40.1332, H40.1333, H40.1334, H40.1390, H40.1391, H40.1392, H40.1393, H40.1394, H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494, H40.151, H40.152, H40.153, H40.159, H40.20X0, H40.20X1, H40.20X2, H40.20X3, H40.20X4, H40.211, H40.212, H40.213, H40.219, H40.2210, H40.2211, H40.2212, H40.2213, H40.2214, H40.2220, H40.2221, H40.2222, H40.2223, H40.2224, H40.2230, H40.2231, H40.2232, H40.2233, H40.2234, H40.2290, H40.2291, H40.2292, H40.2293, H40.2294, H40.231, H40.232, H40.233, H40.239, H40.241, H40.242, H40.243, H40.249, H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.60X0, H40.60X1, H40.60X2, H40.60X3, H40.60X4, H40.61X0, H40.61X1, H40.61X2, H40.61X3, H40.61X4, H40.62X0, H40.62X1, H40.62X2, H40.62X3, H40.62X4, H40.63X0, H40.63X1, H40.63X2, H40.63X3, H40.63X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, Q15.0
	Hereditary Corneal Dystrophies	H18.50, H18.51, H18.52, H18.53, H18.54, H18.55, H18.59
	High Hyperopia	H52.00, H52.01, H52.02, H52.03
	Hypotony of Eye	H44.40, H44.411, H44.412, H44.413, H44.419, H44.421, H44.422, H44.423, H44.429, H44.431, H44.432, H44.433, H44.439, H44.441, H44.442, H44.443, H44.449
	Injury to Optic Nerve and Pathways	S04.011A, S04.012A, S04.019A, S04.02XA, S04.031A, S04.032A, S04.039A, S04.041A, S04.042A, S04.049A
	Open Wound of Eyeball	S05.10XA, S05.11XA, S05.12XA, S05.20XA, S05.21XA, S05.22XA, S05.30XA, S05.31XA, S05.32XA, S05.50XA, S05.51XA, S05.52XA, S05.60XA, S05.61XA, S05.62XA, S05.70XA, S05.71XA, S05.72XA, S05.8X1A, S05.8X2A, S05.8X9A, S05.90XA, S05.91XA, S05.92XA
	Pathologic Myopia	H44.20, H44.21, H44.22, H44.23, H44.30
	Posterior Lenticonus	Q12.2, Q12.4, Q12.8
	Prior Pars Plana Vitrectomy	67036, 67039, 67040, 67041, 67042, 67043 (patient with history of this procedure)

<table>
<tr><td></td><td><table>
<tr><td>Pseudoexfoliation Syndrome</td><td>H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494</td></tr>
<tr><td>Retrolental Fibroplasias</td><td>H35.171, H35.172, H35.173, H35.179</td></tr>
<tr><td>Senile Cataract</td><td>H25.89</td></tr>
<tr><td>Traumatic Cataract</td><td>H26.101, H26.102, H26.103, H26.109, H26.111, H26.112, H26.113, H26.119, H26.121, H26.122, H26.123, H26.129, H26.131, H26.132, H26.133, H26.139</td></tr>
<tr><td>Use of Systemic Sympathetic Alpha-1a Antagonist Medication for Treatment of Prostatic Hypertrophy</td><td>Patient taking tamsulosin hydrochloride</td></tr>
<tr><td>Uveitis</td><td>H44.111, H44.112, H44.113, H44.119, H44.131, H44.132, H44.133, H44.139</td></tr>
<tr><td>Vascular Disorders of Iris and Ciliary Body</td><td>H21.1X1, H21.1X2, H21.1X3, H21.1X9</td></tr>
</table></td></tr>
<tr><td>Numerator</td><td>Patients who had one or more specified operative procedures for any of the following major complications within 30 days following cataract surgery: retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence

Numerator Instructions: Codes for major complications (e.g., retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment, or wound dehiscence): 65235, 65860, 65880, 65900, 65920, 65930, 66030, 66250, 66820, 66825, 66830, 66852, 66986, 67005, 67010, 67015, 67025, 67030, 67031, 67036, 67039, 67040, 67041, 67042, 67043, 67101, 67105, 67107, 67108, 67110, 67112, 67141, 67145, 67250, 67255

Report Quality-Data Code:
G8627: Surgical procedure performed within 30 days following cataract surgery for major complications (e.g., retained nuclear fragments, endophthalmitis, dislocated or wrong power IOL, retinal detachment or wound dehiscence)</td></tr>
<tr><td>Denominator Exceptions</td><td>None</td></tr>
</table>

B. Electronic Health Record Specifications

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eCQM Library and view the most recent publishing:
http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/

Eye Care II

Measure #4: Cataracts: 20/40 or Better Visual Acuity within 90 Days Following Cataract Surgery

A. Registry Specifications

<table>
<tr><td>Denominator (Eligible Population)</td><td>All patients aged 18 years and older who had cataract surgery

Denominator Instructions: Clinicians who indicate modifier 55, postoperative management only OR modifier 56, preoperative management only, will not qualify for this measure.

Age >= 18 years
AND
CPT® Code for cataract procedure: 66840, 66850, 66852, 66920, 66930, 66940, 66982, 66983, 66984</td></tr>
<tr><td>Denominator Exclusions</td><td>Patients with significant ocular conditions impacting the visual outcome of surgery

<table>
<tr><th>Significant Ocular Condition</th><th>Corresponding ICD-9-CM Codes
[for use through 9/30/2015]</th></tr>
<tr><td>Acute and Subacute Iridocyclitis</td><td>364.00, 364.01, 364.02, 364.03, 364.04, 364.05</td></tr>
<tr><td>Amblyopia</td><td>368.01, 368.02, 368.03</td></tr>
<tr><td>Burn Confined to Eye and Adnexa</td><td>940.0, 940.1, 940.2, 940.3, 940.4, 940.5, 940.9</td></tr>
<tr><td>Cataract Secondary to Ocular Disorders</td><td>366.32, 366.33</td></tr>
<tr><td>Central Corneal Ulcer</td><td>370.03</td></tr>
<tr><td>Certain Types of Iridocyclitis</td><td>364.21, 364.22, 364.23, 364.24, 364.3</td></tr>
<tr><td>Choroidal Degenerations</td><td>363.43</td></tr>
<tr><td>Choroidal Detachment</td><td>363.72</td></tr>
<tr><td>Choroidal Hemorrhage and Rupture</td><td>363.61, 363.62, 363.63</td></tr>
<tr><td>Chorioretinal Scars</td><td>363.30, 363.31, 363.32, 363.33, 363.35</td></tr>
<tr><td>Chronic Iridocyclitis</td><td>364.10, 364.11</td></tr>
<tr><td>Cloudy Cornea</td><td>371.01, 371.02, 371.03, 371.04</td></tr>
<tr><td>Corneal Opacity and Other Disorders of Cornea</td><td>371.00, 371.03, 371.04</td></tr>
<tr><td>Corneal Edema</td><td>371.20, 371.21, 371.22, 371.23, 371.43, 371.44</td></tr>
<tr><td>Degeneration of Macula and Posterior Pole</td><td>362.50, 362.51, 362.52, 362.53, 362.54, 362.55, 362.56, 362.57</td></tr>
<tr><td>Degenerative Disorders of Globe</td><td>360.20, 360.21, 360.23, 360.24, 360.29</td></tr>
<tr><td>Diabetic Macular Edema</td><td>362.07</td></tr>
<tr><td>Diabetic Retinopathy</td><td>362.01, 362.02, 362.03, 362.04, 362.05, 362.06</td></tr>
<tr><td>Disorders of Optic Chiasm</td><td>377.51, 377.52, 377.53, 377.54</td></tr>
<tr><td>Disorders of Visual Cortex</td><td>377.75</td></tr>
<tr><td>Disseminated Chorioretinitis and Disseminated Retinochoroiditis</td><td>363.10, 363.11, 363.12, 363.13, 363.14, 363.15</td></tr>
<tr><td>Focal Chorioretinitis and Focal Retinochoroiditis</td><td>363.00, 363.01, 363.03, 363.04, 363.05, 363.06, 363.07, 363.08</td></tr>
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Glaucoma	365.10, 365.11, 365.12, 365.13, 365.14, 365.15, 365.20, 365.21, 365.22, 365.23, 365.24, 365.31, 365.32, 365.51, 365.52, 365.59, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89
Glaucoma Associated with Congenital Anomalies, Dystrophies, and Systemic Syndromes	365.41, 365.42, 365.43, 365.44, 365.60, 365.61, 365.62, 365.63, 365.64, 365.65, 365.81, 365.82, 365.83, 365.89, 365.9
Hereditary Choroidal Dystrophies	363.50, 363.51, 363.52, 363.53, 363.54, 363.55, 363.56, 363.57
Hereditary Corneal Dystrophies	371.50, 371.51, 371.52, 371.53, 371.54, 371.55, 371.56, 371.57, 371.58
Hereditary Retinal Dystrophies	362.70, 362.71, 362.72, 362.73, 362.74, 362.75, 362.76
Injury to Optic Nerve and Pathways	950.0, 950.1, 950.2, 950.3, 950.9
Moderate or Severe Impairment, Better Eye, Profound Impairment Lesser Eye	369.10, 369.11, 369.12, 369.13, 369.14, 369.15, 369.16, 369.17, 369.18
Nystagmus and Other Irregular Eye Movements	379.51
Open Wound of Eyeball	871.0, 871.1, 871.2, 871.3, 871.4, 871.5, 871.6, 871.7, 871.9, 921.3
Optic Atrophy	377.10, 377.11, 377.12, 377.13, 377.14, 377.15, 377.16
Optic Neuritis	377.30, 377.31, 377.32, 377.33, 377.34, 377.39
Other Background Retinopathy and Retinal Vascular Changes	362.12, 362.16, 362.18
Other Corneal Deformities	371.70, 371.71, 371.72, 371.73
Other Disorders of Optic Nerve	377.41
Other Disorders of Sclera	379.11, 379.12
Other Endophthalmitis	360.11, 360.12, 360.13, 360.14, 360.19
Other Proliferative Retinopathy	362.20, 362.21, 362.22, 362.23, 362.24, 362.25, 362.26, 362.27
Other Retinal Disorders	362.81, 362.82, 362.83, 362.84, 362.85, 362.89
Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis	363.20, 363.21, 363.22
Pathologic Myopia	360.20, 360.21
Prior Penetrating Keratoplasty	371.60, 371.61, 371.62
Profound Impairment, Both Eyes	369.00, 369.01, 369.02, 369.03, 369.04, 369.05, 369.06, 369.07, 369.08
Purulent Endophthalmitis	360.00, 360.01, 360.02, 360.03, 360.04
Retinal Detachment with Retinal Defect	361.00, 361.01, 361.02, 361.03, 361.04, 361.05, 361.06, 361.07
Retinal Vascular Occlusion	362.31, 362.32, 362.35, 362.36
Scleritis and Episcleritis	379.04, 379.05, 379.06, 379.07, 379.09
Separation of Retinal Layers	362.41, 362.42, 362.43
Uveitis	360.11, 360.12
Visual Field Defects	368.41

Significant Ocular Condition	Corresponding ICD-10-CM Codes [for use beginning 10/1/2015]
Acute and Subacute Iridocyclitis	H20.00, H20.011, H20.012, H20.013, H20.019, H20.021, H20.022, H20.023, H20.029, H20.031, H20.032, H20.033, H20.039, H20.041, H20.042, H20.043, H20.049, H20.051, H20.052, H20.053, H20.059
Amblyopia	H53.011, H53.012, H53.013, H53.019, H53.021, H53.022, H53.023, H53.029, H53.031, H53.032, H53.033, H53.039
Burn Confined to Eye and Adnexa	T26.00XA, T26.01XA, T26.02XA, T26.10XA, T26.11XA, T26.12XA, T26.20XA, T26.21XA, T26.22XA, T26.30XA, T26.31XA, T26.32XA, T26.40XA, T26.41XA, T26.42XA, T26.50XA, T26.51XA, T26.52XA, T26.60XA, T26.61XA, T26.62XA, T26.70XA, T26.71XA, T26.72XA, T26.80XA, T26.81XA, T26.82XA, T26.90XA, T26.91XA, T26.92XA
Cataract Secondary to Ocular Disorders	H26.211, H26.212, H26.213, H26.219, H26.221, H26.222, H26.223, H26.229
Central Corneal Ulcer	H16.011, H16.012, H16.013, H16.019
Certain Types of Iridocyclitis	H20.20, H20.21, H20.22, H20.23, H20.811, H20.812, H20.813, H20.819, H20.821, H20.822, H20.823, H20.829, H20.9, H40.40X0
Choroidal Degenerations	H35.33
Choroidal Detachment	H31.411, H31.412, H31.413, H31.419
Choroidal Hemorrhage and Rupture	H31.301, H31.302, H31.303, H31.309, H31.311, H31.312, H31.313, H31.319, H31.321, H31.322, H31.323, H31.329
Chorioretinal Scars	H31.001, H31.002, H31.003, H31.009, H31.011, H31.012, H31.013, H31.019, H31.021, H31.022, H31.023, H31.029, H31.091, H31.092, H31.093, H31.099
Chronic Iridocyclitis	A18.54, H20.10, H20.11, H20.12, H20.13, H20.9
Cloudy Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.811, H17.812, H17.813, H17.819, H17.821, H17.822, H17.823, H17.829
Corneal Opacity and Other Disorders of Cornea	H17.00, H17.01, H17.02, H17.03, H17.10, H17.11, H17.12, H17.13, H17.89, H17.9
Corneal Edema	H18.10, H18.11, H18.12, H18.13, H18.20, H18.221, H18.222, H18.223, H18.229, H18.231, H18.232, H18.233, H18.239, H18.421, H18.422, H18.423, H18.429, H18.43
Degeneration of Macula and Posterior Pole	H35.30, H35.31, H35.32, H35.341, H35.342, H35.343, H35.349, H35.351, H35.352, H35.353, H35.359, H35.361, H35.362, H35.363, H35.369, H35.371, H35.372, H35.373, H35.379, H35.381, H35.382, H35.383, H35.389
Degenerative Disorders of Globe	H44.20, H44.21, H44.22, H44.23, H44.311, H44.312, H44.313, H44.319, H44.321, H44.322, H44.323, H44.329, H44.391, H44.392, H44.393, H44.399
Diabetic Macular Edema	E08.311, E08.321, E08.331, E08.341, E08.351, E09.311, E09.321, E09.331, E09.341, E09.351, E10.311, E10.321, E10.331, E10.341, E10.351, E11.311, E11.321, E11.331, E11.341, E11.351, E13.311, E13.321, E13.331, E13.341, E13.351
Diabetic Retinopathy	E08.311, E08.319, E08.321, E08.329, E08.331, E08.339, E08.341, E08.349, E08.351, E08.359, E09.311, E09.319, E09.321, E09.329, E09.331, E09.339, E09.341, E09.349, E09.351, E09.359, E10.311, E10.319, E10.321, E10.329, E10.331, E10.339, E10.341, E10.349, E10.351, E10.359, E11.311, E11.319, E11.321, E11.329, E11.331, E11.339, E11.341, E11.349, E11.351, E11.359, E13.311, E13.319, E13.321, E13.329, E13.331, E13.339, E13.341, E13.349, E13.351, E13.359

	Disorders of Optic Chiasm	H47.41, H47.42, H47.43, H47.49
	Disorders of Visual Cortex	H47.611, H47.612, H47.619
	Disseminated Chorioretinitis and Disseminated Retinochoroiditis	A18.53, H30.101, H30.102, H30.103, H30.109, H30.111, H30.112, H30.113, H30.119, H30.121, H30.122, H30.123, H30.129, H30.131, H30.132, H30.133, H30.139, H30.141, H30.142, H30.143, H30.149
	Focal Chorioretinitis and Focal Retinochoroiditis	H30.001, H30.002, H30.003, H30.009, H30.011, H30.012, H30.013, H30.019, H30.021, H30.022, H30.023, H30.029, H30.031, H30.032, H30.033, H30.039, H30.041, H30.042, H30.043, H30.049
	Glaucoma	H40.10X0, H40.10X1, H40.10X2, H40.10X3, H40.10X4, H40.11X0, H40.11X1, H40.11X2, H40.11X3, H40.11X4, H40.1210, H40.1211, H40.1212, H40.1213, H40.1214, H40.1220, H40.1221, H40.1222, H40.1223, H40.1224, H40.1230, H40.1231, H40.1232, H40.1233, H40.1234, H40.1290, H40.1291, H40.1292, H40.1293, H40.1294, H40.1310, H40.1311, H40.1312, H40.1313, H40.1314, H40.1320, H40.1321, H40.1322, H40.1323, H40.1324, H40.1330, H40.1331, H40.1332, H40.1333, H40.1334, H40.1390, H40.1391, H40.1392, H40.1393, H40.1394, H40.1410, H40.1411, H40.1412, H40.1413, H40.1414, H40.1420, H40.1421, H40.1422, H40.1423, H40.1424, H40.1430, H40.1431, H40.1432, H40.1433, H40.1434, H40.1490, H40.1491, H40.1492, H40.1493, H40.1494, H40.151, H40.152, H40.153, H40.159, H40.20X0, H40.20X1, H40.20X2, H40.20X3, H40.20X4, H40.211, H40.212, H40.213, H40.219, H40.2210, H40.2211, H40.2212, H40.2213, H40.2214, H40.2220, H40.2221, H40.2222, H40.2223, H40.2224, H40.2230, H40.2231, H40.2232, H40.2233, H40.2234, H40.2290, H40.2291, H40.2292, H40.2293, H40.2294, H40.231, H40.232, H40.233, H40.239, H40.241, H40.242, H40.243, H40.249, H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.60X0, H40.60X1, H40.60X2, H40.60X3, H40.60X4, H40.61X0, H40.61X1, H40.61X2, H40.61X3, H40.61X4, H40.62X0, H40.62X1, H40.62X2, H40.62X3, H40.62X4, H40.63X0, H40.63X1, H40.63X2, H40.63X3, H40.63X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, Q15.0

	Glaucoma Associated with Congenital Anomalies, Dystrophies, and Systemic Syndromes	H40.30X0, H40.30X1, H40.30X2, H40.30X3, H40.30X4, H40.31X0, H40.31X1, H40.31X2, H40.31X3, H40.31X4, H40.32X0, H40.32X1, H40.32X2, H40.32X3, H40.32X4, H40.33X0, H40.33X1, H40.33X2, H40.33X3, H40.33X4, H40.40X0, H40.40X1, H40.40X2, H40.40X3, H40.40X4, H40.41X0, H40.41X1, H40.41X2, H40.41X3, H40.41X4, H40.42X0, H40.42X1, H40.42X2, H40.42X3, H40.42X4, H40.43X0, H40.43X1, H40.43X2, H40.43X3, H40.43X4, H40.50X0, H40.50X1, H40.50X2, H40.50X3, H40.50X4, H40.51X0, H40.51X1, H40.51X2, H40.51X3, H40.51X4, H40.52X0, H40.52X1, H40.52X2, H40.52X3, H40.52X4, H40.53X0, H40.53X1, H40.53X2, H40.53X3, H40.53X4, H40.811, H40.812, H40.813, H40.819, H40.821, H40.822, H40.823, H40.829, H40.831, H40.832, H40.833, H40.839, H40.89, H40.9, H42
	Hereditary Choroidal Dystrophies	H31.20, H31.21, H31.22, H31.23, H31.29
	Hereditary Corneal Dystrophies	H18.50, H18.51, H18.52, H18.53, H18.54, H18.55, H18.59
	Hereditary Retinal Dystrophies	H35.50, H35.51, H35.52, H35.53, H35.54, H36
	Injury to Optic Nerve and Pathways	S04.011A, S04.012A, S04.019A, S04.02XA, S04.031A, S04.032A, S04.039A, S04.041A, S04.042A, S04.049A
	Moderate or Severe Impairment, Better Eye, Profound Impairment Lesser Eye	H54.10, H54.11, H54.12
	Nystagmus and Other Irregular Eye Movements	H55.01
	Open Wound of Eyeball	S05.10XA, S05.11XA, S05.12XA, S05.20XA, S05.21XA, S05.22XA, S05.30XA, S05.31XA, S05.32XA, S05.50XA, S05.51XA, S05.52XA, S05.60XA, S05.61XA, S05.62XA, S05.70XA, S05.71XA, S05.72XA, S05.8X1A, S05.8X2A, S05.8X9A, S05.90XA, S05.91XA, S05.92XA
	Optic Atrophy	H47.20, H47.211, H47.212, H47.213, H47.219, H47.22, H47.231, H47.232, H47.233, H47.239, H47.291, H47.292, H47.293, H47.299
	Optic Neuritis	H46.00, H46.01, H46.02, H46.03, H46.10, H46.11, H46.12, H46.13, H46.2, H46.3, H46.8, H46.9
	Other Background Retinopathy and Retinal Vascular Changes	H35.021, H35.022, H35.023, H35.029, H35.051, H35.052, H35.053, H35.059, H35.061, H35.062, H35.063, H35.069
	Other Corneal Deformities	H18.70, H18.711, H18.712, H18.713, H18.719, H18.721, H18.722, H18.723, H18.729, H18.731, H18.732, H18.733, H18.739, H18.791, H18.792, H18.793, H18.799
	Other Disorders of Optic Nerve	H47.011, H47.012, H47.013, H47.019
	Other Disorders of Sclera	H15.831, H15.832, H15.833, H15.839, H15.841, H15.842, H15.843, H15.849
	Other Endophthalmitis	H16.241, H16.242, H16.243, H16.249, H21.331, H21.332, H21.333, H21.339, H33.121, H33.122, H33.123, H33.129, H44.111, H44.112, H44.113, H44.119, H44.121, H44.122, H44.123, H44.129, H44.131, H44.132, H44.133, H44.139, H44.19

	Other Proliferative Retinopathy	H35.101, H35.102, H35.103, H35.109, H35.111, H35.112, H35.113, H35.119, H35.121, H35.122, H35.123, H35.129, H35.131, H35.132, H35.133, H35.139, H35.141, H35.142, H35.143, H35.149, H35.151, H35.152, H35.153, H35.159, H35.161, H35.162, H35.163, H35.169, H35.171, H35.172, H35.173, H35.179
	Other Retinal Disorders	H35.60, H35.61, H35.62, H35.63, H35.81, H35.82, H35.89
	Other and Unspecified Forms of Chorioretinitis and Retinochoroiditis	H30.20, H30.21, H30.22, H30.23, H30.811, H30.812, H30.813, H30.819, H30.891, H30.892, H30.893, H30.899, H30.90, H30.91, H30.92, H30.93
	Pathologic Myopia	H44.20, H44.21, H44.22, H44.23, H44.30
	Prior Penetrating Keratoplasty	H18.601, H18.602, H18.603, H18.609, H18.611, H18.612, H18.613, H18.619, H18.621, H18.622, H18.623, H18.629
	Profound Impairment, Both Eyes	H54.0, H54.10
	Purulent Endophthalmitis	H44.001, H44.002, H44.003, H44.009, H44.011, H44.012, H44.013, H44.019, H44.021, H44.022, H44.023, H44.029
	Retinal Detachment with Retinal Defect	H33.001, H33.002, H33.003, H33.009, H33.011, H33.012, H33.013, H33.019, H33.021, H33.022, H33.023, H33.029, H33.031, H33.032, H33.033, H33.039, H33.041, H33.042, H33.043, H33.049, H33.051, H33.052, H33.053, H33.059, H33.8
	Retinal Vascular Occlusion	H34.10, H34.11, H34.12, H34.13, H34.231, H34.232, H34.233, H34.239, H34.811, H34.812, H34.813, H34.819, H34.831, H34.832, H34.833, H34.839
	Scleritis and Episcleritis	A18.51, H15.021, H15.022, H15.023, H15.029, H15.031, H15.032, H15.033, H15.039, H15.041, H15.042, H15.043, H15.049, H15.051, H15.052, H15.053, H15.059, H15.091, H15.092, H15.093, H15.099
	Separation of Retinal Layers	H35.711, H35.712, H35.713, H35.719, H35.721, H35.722, H35.723, H35.729, H35.731, H35.732, H35.733, H35.739
	Uveitis	H44.111, H44.112, H44.113, H44.119, H44.131, H44.132, H44.133, H44.139
	Visual Field Defects	H53.411, H53.412, H53.413, H53.419
Numerator	Patients who had best-corrected visual acuity of 20/40 or better (distance or near) achieved within 90 days following cataract surgery **Report CPT Category II code:** 4175F: Best-corrected visual acuity of 20/40 or better (distance or near) achieved within the 90 days following cataract surgery	
Denominator Exceptions	None	

B. Electronic Health Record Specifications

As of the date of the posting of this document, this measure is currently in use in CMS' EHR Incentive Program (Meaningful Use). The specifications are updated on a regular basis and published on the CMS website. To download the electronic specifications for this measure, visit CMS' eCQM Library and view the most recent publishing:
http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/eCQM_Library.html

Additional resources for eCQM implementation can also be found at the eCQI Resource Center webpage: https://ecqi.healthit.gov/

Accompanying value sets are available in the Value Set Authority Center (VSAC) found at the following webpage: https://vsac.nlm.nih.gov/