



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 0089e

Corresponding Measures: 0089

De.2. Measure Title: Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care

Co.1.1. Measure Steward: PCPI Foundation

De.3. Brief Description of Measure: 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

1b.1. Developer Rationale: Diabetic retinopathy is a prevalent complication of diabetes, estimated to affect 28.5% of diabetic patients in the US. (1) Diabetic Retinopathy is a key indicator of systemic complications of diabetes. (1) Coordination of care between the eye care specialist and the provider managing a patient's ongoing diabetes care is essential in stemming the progression of vision loss. Communication from the eye care specialist to a primary care physician facilitates the exchange of information about the severity and progression of a patient's diabetic retinopathy, adherence to recommended ocular care, need for follow-up visits, and treatment plans. (2) Data from the Diabetes Control and Complications Trial showed that diabetic treatment and maintenance of glucose control delays the onset and slows the progression of diabetic retinopathy. (3)

1. Zhang X, Saaddine JB, Chou CF, et al. Prevalence of diabetic retinopathy in the United States, 2005-2008. JAMA 2010;304: 649–656

2. Storey PP, Murchison AP, Pizzi LT, Hark LA, Dai Y, Leiby BE, Haller JA. Impact of physician communication on diabetic eye examination adherence: Results from a Retrospective Cohort Analysis. Retina. 2016 Jan;36(1):20-7.

3. Aiello LP; DCCT/EDIC Research Group. Diabetic retinopathy and other ocular findings in the diabetes control and complications trial/epidemiology of diabetes interventions and complications study. Diabetes Care. 2014;37(1):17-23.

S.4. 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

S.6. Denominator Statement: All patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed

S.8. Denominator Exclusions: Denominator Exceptions:

Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician or other qualified health care professional 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.

De.1. Measure Type: Process

S.17. Data Source: Electronic Health Records

S.20. Level of Analysis: Clinician : Group/Practice, Clinician : Individual

IF Endorsement Maintenance – Original Endorsement Date: Nov 04, 2015 **Most Recent Endorsement Date:** Nov 04, 2015

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.**

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

[DR_evidence_attachment_2019_0089e-636912043969856581.docx](#)

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

No

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.

Diabetic retinopathy is a prevalent complication of diabetes, estimated to affect 28.5% of diabetic patients in the US. (1) Diabetic Retinopathy is a key indicator of systemic complications of diabetes. (1) Coordination of care between the eye care specialist and the provider managing a patient's ongoing diabetes care is essential in stemming the progression of vision loss. Communication from the eye care specialist to a primary care physician facilitates the exchange of information about the severity and progression of a patient's diabetic retinopathy, adherence to recommended ocular care, need for follow-up visits, and treatment plans. (2) Data from the Diabetes Control and Complications Trial showed that diabetic treatment and maintenance of glucose control delays the onset and slows the progression of diabetic retinopathy. (3)

1. Zhang X, Saaddine JB, Chou CF, et al. Prevalence of diabetic retinopathy in the United States, 2005-2008. JAMA 2010;304: 649–656

2. Storey PP, Murchison AP, Pizzi LT, Hark LA, Dai Y, Leiby BE, Haller JA. Impact of physician communication on diabetic eye examination adherence: Results from a Retrospective Cohort Analysis. Retina. 2016 Jan;36(1):20-7.

3. Aiello LP; DCCT/EDIC Research Group. Diabetic retinopathy and other ocular findings in the diabetes control and complications trial/epidemiology of diabetes interventions and complications study. Diabetes Care. 2014;37(1):17-23.

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*

Diabetic Retinopathy 0089e: EHR

2016 EHR data from the PQRS program was provided to the PCPI by CMS for the purposes of testing the measure. The data are analyzed for the time period January 2016 through December 2016 and include 891,902 quality events. The mean performance rate is 0.65, the standard deviation is 0.26, the minimum is 0.00, the maximum is 1.00, and the interquartile range is 0.39 (0.86 – 0.48). Performance Scores by Decile: (1st,0.06; 2nd,0.29; 3rd,0.44; 4th,0.56; 5th,0.65; 6th, 0.73; 7th,0.80; 8th,0.88; 9th,0.96; 10th,1.00)

CMS published the following data in the 2017 QPP and 2016 PQRS Experience Reports. Experience report data does not differentiate average performance rates between EHR, registry, and claims. The average performance rates on the Diabetic Retinopathy:

Communication with the Physician Managing Ongoing Diabetes Care measure between 2014-2017 are listed below. It is important to note that both QPP and PQRS are voluntary reporting programs in which eligible providers choose which measure(s) to report, which is reflected in the reporting rate among those eligible to report on this measure. The performance scores listed below are not consistently derived from a nationally representative sample. Nevertheless, the performance scores indicate a gap in care as the average performance rate for the last 4 years range from 74.7% to 81.0%

Year	Average Performance Rate	Reporting Rate
2017	74.78%	-
2016	77.3%	15.4%
2015	74.8%	21.9%
2014	81.0%	25.6%

2017 Quality Payment Program Experience Report. Available at <https://qpp-cm-prod-content.s3.amazonaws.com/uploads/492/2017%20QPP%20Experience%20Report%20Appendix.zip>

2016 Reporting Experience Including Trends (2007-2016), Physician Quality Reporting System. Available at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/Downloads/2016-Appendix.xlsx>

2018 Benchmark Report Data

Submission method	Claims	EHR	Registry/QCQR
Std Deviation	13.1	25	29.9
Average	96.6	66.8	76.5
Decile 3	-	46.15-56.85	52.00-72.40
Decile 4	-	56.86-65.13	72.41-81.47
Decile 5	-	65.14-72.38	81.48-90.76
Decile 6	-	72.39-78.21	90.77-96.54
Decile 7	-	78.22-84.27	96.55-99.99
Decile 8	-	84.28-89.93	-
Decile 9	-	89.94-95.41	-
Decile 10	-	>=95.42	100

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

Recent studies have found less than optimal performance in communication between providers. A retrospective cohort study found that written communication from an ophthalmologist to a primary care physician is associated with improved adherence to recommended diabetic eye examinations. Despite these findings, communication from the ophthalmologist to the primary care provider only occurred for approximately 15% of patients. (1)

A survey of more than 4,000 physicians found similar gaps in communication between specialists and primary care providers, in general. The study found that approximately 81% of specialists stated that they send consultation reports with results to the referring provider, but only 62% of referring providers stated they received such information. The study also reported that physicians who did not receive timely consultation communications were more likely to report a threat to their ability to provide quality care to their patients. (2)

1. Storey PP, Murchison AP, Pizzi LT, Hark LA, Dai Y, Leiby BE, Haller JA. Impact of physician communication on diabetic eye examination adherence: Results from a Retrospective Cohort Analysis. *Retina*. 2016 Jan;36(1):20-7.

2. O'Malley AS, Reschovsky JD. Referral and consultation communication between primary care and specialist physicians: finding common ground. *Arch Intern Med*. 2011 Jan 10;171(1):56-65.

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity,

gender, age, insurance status, socioeconomic status, and/or disability. (*This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.*) For measures that show high levels of performance, i.e., “topped out”, disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.

While this measure is included in a federal reporting program(s), the program does not provide disparities data to analyze and report. In Section 1b.5 below, we provide disparities data reported in the literature.

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

Various studies have examined disparities in the incidence, prevalence, assessment and treatment of diabetic retinopathy. (1-4) We are unaware of studies that have examined disparities in the communication between specialists and clinicians managing the ongoing care of patients with diabetes.

1. Varma R, Choudhury F, Klein R, Chung J, Torres M, Azen SP; Los Angeles Latino Eye Study Group. Four-year incidence and progression of diabetic retinopathy and macular edema: the Los Angeles Latino Eye Study. *Am J Ophthalmol*. 2010 May;149(5):752-61.e1-3.

2. Luo H, Bell RA, Garg S, Cummings DM, Patil SP, Jones K. Trends and racial/ethnic disparities in diabetic retinopathy among adults with diagnosed diabetes in North Carolina, 2000-2015. *N C Med J*. 2019 Mar-Apr;80(2):76-82.

3. Hwang J, Rudnisky C, Bowen S, Johnson JA. Income-related inequalities in visual impairment and eye screening services in patients with type 2 diabetes. *J Public Health*. 2016 Dec 2;38(4):e571-e579.

4. Fathy C, Patel S, Sternberg P Jr, Kohanim S. Disparities in adherence to screening guidelines for diabetic retinopathy in the United States: A Comprehensive Review and Guide for Future Directions. *Semin Ophthalmol*. 2016;31(4):364-77.

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

Ears, Nose, Throat (ENT), Endocrine, Endocrine : Diabetes, Eye Care

De.6. Non-Condition Specific(check all the areas that apply):

Health and Functional Status : Change

De.7. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Elderly

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

The measure specifications are attached to this submission. Additional measure details may be found at: eCQI Resource Center <https://ecqi.healthit.gov/eligible-professional-eligible-clinician-ecqms>. Value set details at VSAC: <https://vsac.nlm.nih.gov/>.

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool

(MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is an eMeasure Attachment: CMS142v7.zip

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: CMS142_NQF0089_ValueSets_20180917.xlsx

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

No, this is not an instrument-based measure Attachment:

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Not an instrument-based measure

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

Yes

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

Supporting guidelines and coding value sets included in the measure are reviewed on an annual basis. This annual review has resulted in minor changes to the value sets, to account for updates to the coding terminologies for existing data elements, as well as removal of coding related to 'unspecified eye,' as these codes were determined by clinical experts to potentially lead to poor documentation practices. Measure specifications are annually updated to align with any changes to the standards or tools used to support electronic measurement.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

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

S.5. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Time Period for Data Collection: At least once during the measurement period

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.

GUIDANCE:

The measure, as written, does not specifically require documentation of laterality. Coding limitations in particular clinical

terminologies do not currently allow for that level of specificity (ICD-10-CM includes laterality, but ICD-9-CM and SNOMED-CT do not uniformly include this distinction). Therefore, at this time, it is not a requirement of this measure to indicate laterality of the diagnoses, findings or procedures. Available coding to capture the data elements specified in this measure has been provided. It is assumed that the eligible professional or eligible clinician will record laterality in the patient medical record, as quality care and clinical documentation should include laterality.

The communication of results to the primary care physician providing ongoing care of a patient's diabetes should be completed soon after the dilated exam is performed. Eligible professionals or eligible clinicians reporting on this measure should note that all data for the reporting year is to be submitted by the deadline established by CMS. Therefore, eligible professionals or eligible clinicians who see patients towards the end of the reporting period (ie, December in particular), should communicate the results of the dilated macular exam as soon as possible in order for those patients to be counted in the measure numerator. Communicating the results as soon as possible after the date of the exam will ensure the data are included in the submission to CMS.

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

S.6. Denominator Statement *(Brief, narrative description of the target population being measured)*

All patients aged 18 years and older with a diagnosis of diabetic retinopathy who had a dilated macular or fundus exam performed

S.7. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Time Period for Data Collection: 12 consecutive months

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

S.8. Denominator Exclusions *(Brief narrative description of exclusions from the target population)*

Denominator Exceptions:

Documentation of medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician or other qualified health care professional 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.

S.9. Denominator Exclusion Details *(All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

Time Period for Data Collection: During the encounter within the 12-month period

Exceptions are used to remove a patient from the denominator of a performance measure when the patient does not receive a therapy or service AND that therapy or service would not be appropriate due to patient-specific reasons. The patient would otherwise meet the denominator criteria. Exceptions are not absolute, and are based on clinical judgment, individual patient characteristics, or patient preferences. The PCPI exception methodology uses three categories of reasons for which a patient may be removed from the denominator of an individual measure. These measure exception categories are not uniformly relevant across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. For measure Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care, exceptions may include medical reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician or other qualified health care professional who manages the ongoing care of the patient with diabetes, or patient reason(s) for not communicating the findings of the dilated macular or fundus exam to the physician or other qualified health care professional who manages the ongoing care of the patient with diabetes. Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the specific reasons for exception in patients' medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each

physician's exceptions data to identify practice patterns and opportunities for quality improvement.

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

S.10. Stratification Information *(Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)*

Consistent with CMS' Measures Management System Blueprint and national recommendations put forth by the IOM (now NASEM) and NQF, the PCPI encourages collection of race and ethnicity data as well as the results of this measure to be stratified by race, ethnicity, administrative sex, and payer.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score *(Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)*

Better quality = Higher score

S.14. Calculation Algorithm/Measure Logic *(Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)*

To calculate performance rates:

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.
4. From the patients who did not meet the numerator criteria, determine if the provider has documented that the patient meets any criteria for exception when denominator exceptions have been specified [for this measure: 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, or 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]. If the patient meets any exception criteria, they should be removed from the denominator for performance calculation. --Although the exception cases are removed from the denominator population for the performance calculation, the exception rate (ie, percentage with valid exceptions) should be calculated and reported along with performance rates to track variations in care and highlight possible areas of focus for QI.

If the patient does not meet the numerator and a valid exception is not present, this case represents a quality failure.

S.15. Sampling *(If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)*

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

Not applicable. The measure is not based on a sample.

S.16. Survey/Patient-reported data *(If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)*

Specify calculation of response rates to be reported with performance measure results.

Not applicable. The measure is not based on a survey.

S.17. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Electronic Health Records

S.18. Data Source or Collection Instrument (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

If instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

Not applicable.

S.19. Data Source or Collection Instrument (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

No data collection instrument provided

S.20. Level of Analysis (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Clinician : Group/Practice, Clinician : Individual

S.21. Care Setting (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Other, Outpatient Services, Post-Acute Care

If other: Domiciliary

S.22. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

Not applicable. The measure is not a composite.

2. Validity – See attached Measure Testing Submission Form

v2_0089e_nqf_testing_attachment_7.1-636849654289864033.docx,0089e_MAR282019_nqf_testing_attachment_7.1.docx

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

Yes

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1,2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.

No - This measure is not risk-adjusted

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

Generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score)

If other:

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for maintenance of endorsement.

ALL data elements are in defined fields in electronic health records (EHRs)

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For maintenance of endorsement, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

We have not identified an areas of concern or made any modifications as a result of testing and operational use of the measure in relation to data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, and other feasibility issues unless otherwise noted.

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes (e.g., use by healthcare providers in connection with their practice). Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and the PCPI® Foundation (PCPI®).

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals

or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)
	<p>Public Reporting</p> <p>Merit-based Incentive Payment System (MIPS) https://qpp.cms.gov/mips/quality-measures</p> <p>Merit-based Incentive Payment System (MIPS) https://qpp.cms.gov/mips/quality-measures</p> <p>Payment Program</p> <p>Merit-based Incentive Payment System (MIPS) https://qpp.cms.gov/mips/quality-measures</p> <p>Intelligent Research in Sight (IRIS) http://www.aao.org/iris-registry/</p> <p>AOA MORE Registry https://www.aao.org/more</p> <p>Merit-based Incentive Payment System (MIPS) https://qpp.cms.gov/mips/quality-measures</p> <p>Intelligent Research in Sight (IRIS) http://www.aao.org/iris-registry/</p> <p>AOA MORE Registry https://www.aao.org/more</p>

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Merit-based Incentive Payment System (MIPS)-Sponsored by the Centers for Medicare and Medicaid Services (CMS)

Prior to 2016, this measure was used for Eligible Providers (EPs) in the Physician Quality Reporting System (PQRS). As of 2017, PQRS has been replaced by the MIPS program. MIPS is a national performance-based payment program that uses performance scores across several categories to determine payment rates for EPs. MIPS takes a comprehensive approach to payment by basing consideration of quality on a set of evidence-based measures that were primarily developed by clinicians, thus encouraging improvement in clinical practice and supporting advances in technology that allow for easy exchange of information

According to the CY 2019 Quality Payment Program final rule, Physician Compare has continued to pursue a phased approach to public reporting under MACRA. CMS intends to make all measures under MIPS quality performance category available for public reporting on Physician Compare. These measures include those reported via all available submission methods for MIPS-eligible clinicians and groups. This measure has now been included in Physician Compare and performance rates will be available sometime in 2019.

Measures and Outcomes Registry for Eyecare (MORE)

The MORE registry is a qualified clinical data registry (QCDR) sponsored by the American Optometric Association. AOA MORE is the

nations' first optometric-focused registry. The primary initial goals of the registry are to assist eye-care practices in improving the quality of care, and to submit quality measures to the MIPS program. As of April 2018, AOA MORE was able to attest and submit data for over 600 optometrists and more than 7,492 AOA members are registered with MORE.

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

The PCPI strongly encourages the use of its measures in quality improvement and accountability initiatives and promotes their use in public reporting programs. Measures developed by the PCPI, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by health care providers in connection with their practices. As a measure developer, we work with measure implementers as opportunities arise to encourage and facilitate the integration of PCPI measures in their programs.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

The PCPI measure development and maintenance process is a rigorous, evidence-based process that has been refined and standardized since the PCPI's inception in 2000. Throughout its tenure, the PCPI has conducted its measure development and maintenance process with strict adherence to several key principles, including the following which underscore the role those being measured have played in the development and maintenance process and in providing feedback based on measure implementation:

Collaborative Approach to Measure Development

PCPI measures are developed and maintained through cross-specialty, multi-disciplinary technical expert panels. Representatives of relevant clinical specialties are invited to participate in our expert panels to advise us throughout the measure development process and as questions arise during measure implementation. Additionally, other health care providers and stakeholders participate in our panels as equal contributors to the measure development process. The PCPI also strives to include on its panels individuals representing the perspectives of patients, consumers, private health plans, and employers. Liaisons from key measure development organizations, including The Joint Commission and NCQA, at times participate in the PCPI's measure development process to ensure measure harmonization. Measure methodologists and coding and informatics experts are also considered important members of the expert panel. This broad-based approach to measure development maximizes the input from those being measured and other stakeholders to develop evidence-based, feasible and clinically meaningful measures.

Public Comment Period

Input from a wide range of stakeholders is integral to the measure development process. To invite other perspectives and expertise beyond the expert panels and particularly from those providers and facilities that will implement these measures, the PCPI submits the measures for public comment. All measures are released for a 30-day public and PCPI member comment period. All comments are reviewed by the technical expert panel to determine whether measure modifications are needed based on comments received.

Feedback Mechanisms

The PCPI has a dedicated mechanism set up to receive measure-related comments and questions from implementers. As comments and questions are received, they are shared with appropriate staff for follow up.

Feasibility Assessments

The PCPI solicits feedback on measure feasibility in the following domains: data availability, data accuracy, data standards, and workflow to guide future modifications to the measure.

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

Feedback Mechanisms

The PCPI has a dedicated mechanism set up to receive measure-related comments and questions from implementers. As comments and questions are received, they are shared with appropriate staff for follow up. If comments or questions require expert input, these are shared with the PCPI's technical expert panels to determine if measure modifications may be warranted. Additionally, for PCPI measures included in federal reporting programs, there is a system that has been set up to elicit timely feedback and responses from PCPI staff in consultation with technical expert panel members, as appropriate.

Feasibility Assessments

The PCPI solicits feedback on measure feasibility in the following domains: data availability, data accuracy, data standards, and workflow to guide future modifications to the measure. During this process, we may receive recommendations to improve the experience of those implementing and reporting on this measure and we follow up on any questions or concerns received by those completing the feasibility assessment. Doing so addresses any issues with interpretation and serves as an important step in the measure development process.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

As described in Section 4a2.1.1, the PCPI invites feedback through various mechanisms. We obtain input from our topic-specific technical expert panels during the measure development and during the annual maintenance process. Additionally, the PCPI obtains feedback via an online public comment and an email-based process set up to receive measure inquiries from implementers.

4a2.2.2. Summarize the feedback obtained from those being measured.

Feedback obtained for this measure includes a request for clarification about the types of communication that would meet the measure. We added a definition to the measure to clarify that the communication would need to be documented and must include findings of the dilated macular or fundus exam. Communication may be verbal or via a written or electronic communication.

We have also obtained feedback requesting clarification about the information that should be included in the communication. As a result, we added a definition stating that the communication would include level of severity of retinopathy (eg, mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema.

4a2.2.3. Summarize the feedback obtained from other users

Feedback obtained from other users similarly requested clarification about the types of communication that would meet the measure.

We have also obtained feedback requesting clarification about the information that should be included in the communication.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

In response to the feedback we received, we added a definition to the measure to clarify that the communication would need to be documented and must include findings of the dilated macular or fundus exam. Communication may be verbal or via a written or electronic communication. We also added a definition stating that the communication would include level of severity of retinopathy (eg, mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable

entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

The intent of this measure is to help improve the care of patients with diabetic retinopathy. CMS data report a clear gap in care evidenced with a performance rate of 74.78% in 2017 which marked a decrease from the rate of 81.0% in 2014. However, performance rates represent but one facet of the quality improvement process.

While the PCPI creates measures with the ultimate goal of improving the quality of care, measurement is a mechanism to drive improvement but does not equate with improvement. Measurement can help identify opportunities for improvement with actual improvement requiring making changes to health care processes and/or structure. In order to promote improvement, quality measurement systems need to provide feedback to front-line clinical staff in as close to real time as possible and at the point of care whenever possible. (1)

1. Conway PH, Mostashari F, Clancy C. The future of quality measurement for improvement and accountability. JAMA. 2013 Jun 5;309(21):2215-6.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

We have not received reports of unexpected findings resulting from the implementation of this measure. The PCPI has various mechanisms in place for measure users to provide feedback and to identify issues related to the maintenance and implementation of this measure. We convene several topic-specific technical expert panels comprised of various stakeholders including those being measured to advise us regarding any unexpected findings and actions that can be taken to mitigate them.

4b2.2. Please explain any unexpected benefits from implementation of this measure.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.
Yes

5.1a. List of related or competing measures (selected from NQF-endorsed measures)

0055 : Comprehensive Diabetes Care: Eye Exam (retinal) performed

5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.

5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed

measure(s):

Are the measure specifications harmonized to the extent possible?

Yes

5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

Measure #0055 evaluates the percentage of patients 18-75 years of age with diabetes who had an eye exam (retinal) performed. While the population is similar, the PCPI measure requires that a dilated macular or fundus exam be performed, and the results communicated to the physician who manages the ongoing care of the patient with diabetes so as to facilitate the coordination of care.

5b. Competing Measures

The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);

OR

Multiple measures are justified.

5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):

Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)

not applicable

Appendix

A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.

No appendix Attachment:

Contact Information

Co.1 Measure Steward (Intellectual Property Owner): PCPI Foundation

Co.2 Point of Contact: Samantha, Tierney, samantha.tierney@thepcpi.org, 312-224-6071-

Co.3 Measure Developer if different from Measure Steward: PCPI Foundation

Co.4 Point of Contact: Elvia, Chavarria, elvia.chavarria@thepcpi.org, 312-224-6064-

Additional Information

Ad.1 Workgroup/Expert Panel involved in measure development

Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

PCPI measures are maintained under the aegis of topic-specific technical expert panels (TEPs). The PCPI TEPs are comprised of clinicians and other healthcare professionals representing medical specialty societies and other stakeholders. The TEPs provide clinical expertise as well as advise on methodologic questions and review the measures annually to ensure accuracy and adherence to the most current evidence.

Technical Expert Panel:

John T. Thompson, MD – TEP Co-Chair

Parag Parekh, MD – TEP Co-Chair

TEP members:

Murray Fingeret, OD
David Glasser, MD
Richard Hellman, MD,
Mathew W. MacCumber, MD, PhD
Zachary McCarty, OD
Marc Piccolo, OD
Thomas Wong, OD

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2006

Ad.3 Month and Year of most recent revision: 12, 2018

Ad.4 What is your frequency for review/update of this measure? Supporting guidelines, specifications, and coding for this measure are reviewed annually

Ad.5 When is the next scheduled review/update for this measure? 12, 2019

Ad.6 Copyright statement: © 2019 PCPI® Foundation and American Medical Association. All Rights Reserved.

Ad.7 Disclaimers: 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. The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, eg, use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and the AMA, (on behalf of the PCPI). Neither the AMA, PCPI nor its members shall be responsible for any use of the Measures.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

CPT® contained in the Measure specifications is copyright 2004-2014 American Medical Association. LOINC® copyright 2004-2014 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms® (SNOMED CT®) copyright 2004-2014 International Health Terminology Standards Development Organisation. ICD-10 copyright 2014 World Health Organization. All Rights Reserved.

Ad.8 Additional Information/Comments: