

eCQM Title	Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care		
eCQM Identifier (Measure Authoring Tool)	142	eCQM Version Number	13.1.000
CBE Number	Not Applicable	GUID	53d6d7c3-43fb-4d24-8099-17e74c022c05
Measurement Period	January 1, 20XX through December 31, 20XX		
Measure Steward	American Academy of Ophthalmology		
Measure Developer	American Academy of Ophthalmology		
Measure Developer	American Medical Association (AMA)		
Measure Developer	PCPI(R) Foundation (PCPI[R])		
Endorsed By	None		
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 during the measurement period		
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Measure Scoring	Proportion		
Measure Type	Process		
Stratification	None		
Risk Adjustment	None		
Rate Aggregation	None		
Rationale	Diabetic retinopathy is a prevalent complication of diabetes, estimated to affect 28.5% of diabetic patients in the US (Zhang et al., 2010). Diabetic retinopathy is a key indicator of systemic complications of diabetes (Zhang et al., 2010). Coordination of care between the eye care specialist and the physician 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 (Storey et al., 2016). 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 (Aiello & DCCT/EDIC Research Group, 2014).		
Clinical Recommendation Statement	<p>The ophthalmologist should refer patients with diabetes to a primary care physician for appropriate management of their systemic condition and should communicate examination results to the physician managing the patient's ongoing diabetes care (III; Good Quality; Strong Recommendation) (Flaxel et al., 2020).</p> <p>Ophthalmologists should communicate the ophthalmologic findings and level of retinopathy with the primary care physician as well as the need for optimizing metabolic control (III; Good Quality; Strong Recommendation) (Flaxel et al., 2020).</p> <p>Close partnership with the primary care physician is important to make sure that the care of the patient is optimized (III; Good Quality; Strong Recommendation) (Flaxel et al., 2020).</p>		
Improvement Notation	Higher score indicates better quality		
Reference	Reference Type: CITATION		
Reference	Reference Text: 'Aiello, L. P., & DCCT/EDIC Research Group (2014). Diabetic retinopathy and other ocular findings in the diabetes control and complications trial/epidemiology of diabetes interventions and complications study. Diabetes care, 37(1), 17-23. doi:10.2337/dc13-2251'		
Reference	Reference Type: CITATION		
Reference	Reference Text: 'Flaxel, C. J., Adelman, R. A., Bailey, S. T., Fawzi, A., Lim, J. I., Vemulakonda, G. A., & Ying, G. S. (2020). Diabetic Retinopathy Preferred Practice Pattern(R). Ophthalmology, 127(1), P66-P145. https://doi.org/10.1016/j.ophtha.2019.09.025'		
Reference	Reference Type: CITATION		
Reference	Reference Text: 'Storey, P. P., Murchison, A. P., Pizzi, L. T., Hark, L. A., Dai, Y., Leiby, B. E., & Haller, J. A. (2016). Impact of physician communication on diabetic eye examination adherence: Results from a Retrospective Cohort Analysis. Retina.;36(1),20-7. doi:10.1097/IAE.0000000000000652'		
Reference	Reference Type: CITATION		
Reference	Reference Text: 'Zhang, X., Saaddine, J. B., Chou, C. F., Cotch, M. F., Cheng, Y. J., Geiss, L. S., ... Klein, R. (2010). Prevalence of diabetic retinopathy in the United States, 2005-2008. JAMA, 304(6), 649-656. doi:10.1001/jama.2010.1111'		
Definition	<p>Communication - May include documentation in the medical record indicating that the findings of the dilated macular or fundus exam were communicated (e.g., 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.</p> <p>Findings - Includes level of severity of retinopathy (e.g., mild nonproliferative, moderate nonproliferative, severe nonproliferative, very severe nonproliferative, proliferative) AND the presence or absence of macular edema.</p>		

Guidance	<p>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 SNOMED-CT does 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 clinician will record laterality in the patient medical record, as quality care and clinical documentation should include laterality.</p> <p>The communication of results, including the level of severity of diabetic retinopathy and presence or absence of macular edema to the primary care physician providing ongoing care of a patient's diabetes should be completed soon after the dilated exam is performed. Eligible clinicians reporting on this measure should note that all data for the measurement period is to be submitted by the deadline established by CMS. Therefore, eligible clinicians who see patients towards the end of the measurement period (i.e., 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.</p> <p>This eCQM is a patient-based measure.</p> <p>Telehealth encounters are not eligible for this measure because the measure requires a clinical action that cannot be conducted via telehealth.</p> <p>This version of the eCQM uses QDM version 5.6. Please refer to the eCQI resource center (https://ecqi.healthit.gov/qdm) for more information on the QDM.</p>
Transmission Format	TBD
Initial Population	All patients aged 18 years and older with a diagnosis of diabetic retinopathy
Denominator	Equals Initial Population who had a dilated macular or fundus exam performed
Denominator Exclusions	None
Numerator	Patients with documentation, at least once within the measurement period, of the findings of the dilated macular or fundus exam via communication to the physician who manages the patient's diabetic care
Numerator Exclusions	Not Applicable
Denominator Exceptions	<p>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.</p> <p>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.</p>
Supplemental Data Elements	For every patient evaluated by this measure also identify payer, race, ethnicity and sex

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Population Criteria

Initial Population

AgeInYearsAt(date from start of "Measurement Period") >= 18
and exists "Diabetic Retinopathy Encounter"

Denominator

"Initial Population"
and exists "Macular Exam Performed"

Denominator Exclusions

None

Numerator

exists "Level of Severity of Retinopathy Findings Communicated"
and (exists "Macular Edema Absence Communicated"
or exists "Macular Edema Presence Communicated"
)

Numerator Exclusions

None

Denominator Exceptions

exists "Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy"
or exists "Medical or Patient Reason for Not Communicating Absence of Macular Edema"
or exists "Medical or Patient Reason for Not Communicating Presence of Macular Edema"

Stratification

None

Definitions

Denominator

"Initial Population"
and exists "Macular Exam Performed"

Denominator Exceptions

exists "Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy"
or exists "Medical or Patient Reason for Not Communicating Absence of Macular Edema"
or exists "Medical or Patient Reason for Not Communicating Presence of Macular Edema"

▲ Diabetic Retinopathy Encounter

"Qualifying Encounter During Measurement Period" ValidQualifyingEncounter
with ["Diagnosis": "Diabetic Retinopathy"] DiabeticRetinopathy
such that DiabeticRetinopathy.prevalencePeriod overlaps ValidQualifyingEncounter.relevantPeriod

▲ Initial Population

AgeInYearsAt(date from start of "Measurement Period") >= 18
and exists "Diabetic Retinopathy Encounter"

▲ Level of Severity of Retinopathy Findings Communicated

["Communication, Performed": "Level of Severity of Retinopathy Findings"] LevelOfSeverityCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that LevelOfSeverityCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
and LevelOfSeverityCommunicated.sentDatetime during day of "Measurement Period"

▲ Macular Edema Absence Communicated

["Communication, Performed": "Macular edema absent (situation)"] MacularEdemaAbsentCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that MacularEdemaAbsentCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
and MacularEdemaAbsentCommunicated.sentDatetime during day of "Measurement Period"

▲ Macular Edema Presence Communicated

["Communication, Performed": "Macular Edema Findings Present"] MacularEdemaPresentCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that MacularEdemaPresentCommunicated.sentDatetime after start of EncounterDiabeticRetinopathy.relevantPeriod
and MacularEdemaPresentCommunicated.sentDatetime during day of "Measurement Period"

▲ Macular Exam Performed

["Diagnostic Study, Performed": "Macular Exam"] MacularExam
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that Global."NormalizeInterval" (MacularExam.relevantDatetime, MacularExam.relevantPeriod) during EncounterDiabeticRetinopathy.relevantPeriod
where MacularExam.result is not null

▲ Medical or Patient Reason for Not Communicating Absence of Macular Edema

["Communication, Not Performed": "Macular edema absent (situation)"] MacularEdemaAbsentNotCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that MacularEdemaAbsentNotCommunicated.authorDatetime during EncounterDiabeticRetinopathy.relevantPeriod
where (MacularEdemaAbsentNotCommunicated.negationRationale in "Medical Reason"
or MacularEdemaAbsentNotCommunicated.negationRationale in "Patient Reason"
)

▲ Medical or Patient Reason for Not Communicating Level of Severity of Retinopathy

["Communication, Not Performed": "Level of Severity of Retinopathy Findings"] LevelOfSeverityNotCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that LevelOfSeverityNotCommunicated.authorDatetime during EncounterDiabeticRetinopathy.relevantPeriod
where (LevelOfSeverityNotCommunicated.negationRationale in "Medical Reason"
or LevelOfSeverityNotCommunicated.negationRationale in "Patient Reason"
)

▲ Medical or Patient Reason for Not Communicating Presence of Macular Edema

["Communication, Not Performed": "Macular Edema Findings Present"] MacularEdemaPresentNotCommunicated
with "Diabetic Retinopathy Encounter" EncounterDiabeticRetinopathy
such that MacularEdemaPresentNotCommunicated.authorDatetime during EncounterDiabeticRetinopathy.relevantPeriod
where (MacularEdemaPresentNotCommunicated.negationRationale in "Medical Reason"
or MacularEdemaPresentNotCommunicated.negationRationale in "Patient Reason"
)

▲ Numerator

exists "Level of Severity of Retinopathy Findings Communicated"
and (exists "Macular Edema Absence Communicated"
or exists "Macular Edema Presence Communicated"
)

▲ Qualifying Encounter During Measurement Period

(["Encounter, Performed": "Office Visit"]
union ["Encounter, Performed": "Ophthalmological Services"]
union ["Encounter, Performed": "Outpatient Consultation"]
union ["Encounter, Performed": "Care Services in Long Term Residential Facility"]
union ["Encounter, Performed": "Nursing Facility Visit"]) QualifyingEncounter
where QualifyingEncounter.relevantPeriod during "Measurement Period"
and QualifyingEncounter.class !~ "virtual"

▲ SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

▲ SDE Payer

["Patient Characteristic Payer": "Payer Type"]

▲ SDE Race

["Patient Characteristic Race": "Race"]

▲ SDE Sex

["Patient Characteristic Sex": "ONC Administrative Sex"]

Functions

Global.NormalizeInterval(pointInTime DateTime, period Interval<DateTime>)

if pointInTime is not null then Interval[pointInTime, pointInTime]
else if period is not null then period
else null as Interval<DateTime>

Terminology

- code "Macular edema absent (situation)" ("SNOMEDCT Code (428341000124108)")
- code "virtual" ("ActCode Code (VR)")
- valueset "Care Services in Long Term Residential Facility" (2.16.840.1.113883.3.464.1003.101.12.1014)
- valueset "Diabetic Retinopathy" (2.16.840.1.113883.3.526.3.327)
- valueset "Ethnicity" (2.16.840.1.114222.4.11.837)
- valueset "Level of Severity of Retinopathy Findings" (2.16.840.1.113883.3.526.3.1283)
- valueset "Macular Edema Findings Present" (2.16.840.1.113883.3.526.3.1320)
- valueset "Macular Exam" (2.16.840.1.113883.3.526.3.1251)
- valueset "Medical Reason" (2.16.840.1.113883.3.526.3.1007)
- valueset "Nursing Facility Visit" (2.16.840.1.113883.3.464.1003.101.12.1012)
- valueset "Office Visit" (2.16.840.1.113883.3.464.1003.101.12.1001)
- valueset "ONC Administrative Sex" (2.16.840.1.113762.1.4.1)
- valueset "Ophthalmological Services" (2.16.840.1.113883.3.526.3.1285)
- valueset "Outpatient Consultation" (2.16.840.1.113883.3.464.1003.101.12.1008)
- valueset "Patient Reason" (2.16.840.1.113883.3.526.3.1008)
- valueset "Payer Type" (2.16.840.1.114222.4.11.3591)
- valueset "Race" (2.16.840.1.114222.4.11.836)

Data Criteria (QDM Data Elements)

- "Communication, Not Performed: Level of Severity of Retinopathy Findings" using "Level of Severity of Retinopathy Findings (2.16.840.1.113883.3.526.3.1283)"
- "Communication, Not Performed: Macular edema absent (situation)" using "Macular edema absent (situation) (SNOMEDCT Code 428341000124108)"
- "Communication, Not Performed: Macular Edema Findings Present" using "Macular Edema Findings Present (2.16.840.1.113883.3.526.3.1320)"
- "Communication, Performed: Level of Severity of Retinopathy Findings" using "Level of Severity of Retinopathy Findings (2.16.840.1.113883.3.526.3.1283)"
- "Communication, Performed: Macular edema absent (situation)" using "Macular edema absent (situation) (SNOMEDCT Code 428341000124108)"
- "Communication, Performed: Macular Edema Findings Present" using "Macular Edema Findings Present (2.16.840.1.113883.3.526.3.1320)"
- "Diagnosis: Diabetic Retinopathy" using "Diabetic Retinopathy (2.16.840.1.113883.3.526.3.327)"
- "Diagnostic Study, Performed: Macular Exam" using "Macular Exam (2.16.840.1.113883.3.526.3.1251)"
- "Encounter, Performed: Care Services in Long Term Residential Facility" using "Care Services in Long Term Residential Facility (2.16.840.1.113883.3.464.1003.101.12.1014)"
- "Encounter, Performed: Nursing Facility Visit" using "Nursing Facility Visit (2.16.840.1.113883.3.464.1003.101.12.1012)"
- "Encounter, Performed: Office Visit" using "Office Visit (2.16.840.1.113883.3.464.1003.101.12.1001)"
- "Encounter, Performed: Ophthalmological Services" using "Ophthalmological Services (2.16.840.1.113883.3.526.3.1285)"
- "Encounter, Performed: Outpatient Consultation" using "Outpatient Consultation (2.16.840.1.113883.3.464.1003.101.12.1008)"
- "Patient Characteristic Ethnicity: Ethnicity" using "Ethnicity (2.16.840.1.114222.4.11.837)"
- "Patient Characteristic Payer: Payer Type" using "Payer Type (2.16.840.1.114222.4.11.3591)"
- "Patient Characteristic Race: Race" using "Race (2.16.840.1.114222.4.11.836)"
- "Patient Characteristic Sex: ONC Administrative Sex" using "ONC Administrative Sex (2.16.840.1.113762.1.4.1)"

Supplemental Data Elements

SDE Ethnicity

["Patient Characteristic Ethnicity": "Ethnicity"]

SDE Payer

["Patient Characteristic Payer": "Payer Type"]

SDE Race

["Patient Characteristic Race": "Race"]

SDE Sex

["Patient Characteristic Sex": "ONC Administrative Sex"]

Risk Adjustment Variables

None

Measure Set	None