

NQF 0088: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

Clinical Quality Measure Quick Reference Guide and Technical Supplement

Provided By:

The National Learning Consortium (NLC)

Developed By:

Health Information Technology Research Center (HITRC)

The material in this document was developed by Regional Extension Center staff in the performance of technical support and EHR implementation. The information in this document is not intended to serve as legal advice nor should it substitute for legal counsel. Users are encouraged to seek additional detailed technical guidance to supplement the information contained within. The REC staff developed these materials based on the technology and law that were in place at the time this document was developed. Therefore, advances in technology and/or changes to the law subsequent to that date may not have been incorporated into this material.

NATIONAL LEARNING CONSORTIUM

The National Learning Consortium (NLC) is a virtual and evolving body of knowledge and tools designed to support healthcare providers and health IT professionals working towards the implementation, adoption and meaningful use of certified EHR systems.

The NLC represents the collective EHR implementation experiences and knowledge gained directly from the field of ONC's outreach programs ([REC](#), [Beacon](#), [State HIE](#)) and through the [Health Information Technology Research Center \(HITRC\)](#) Communities of Practice (CoPs).

The following resource is an example of a tool used in the field today that is recommended by "boots-on-the-ground" professionals for use by others who have made the commitment to implement or upgrade to certified EHR systems.

DESCRIPTION

The Clinical Quality Measure (CQM) quick reference guides provide a summary of key information for CQMs and are intended to be shared with clinical staff using an electronic health record (EHR). The first two sections may be distributed as stand-alone references.

The first section, *Quick Facts*, comes from the CQM e-specifications and is intended to provide an overview of the measure. This section provides information on the measure definition, whether the measure is a core, alternate core, or menu set measure, whether it is related to other measures by common data elements, and what data goes into a numerator, denominator, and exclusions or exceptions.

The second section, *Key Clinical Activities* and *Planning Your EHR Documentation*, is intended to be a space to plan EHR documentation. It provides a "to-do list" of clinical and documentation activities for the measure and lists each data element that is required to calculate the numerator, denominator, and exceptions or exclusions. Providers can use this space to assign individuals or roles to tasks in the to-do list.

The third section, *Technical Supplement*, provides clarifications regarding what "counts" toward this measure. First, it provides English "translations" of the numeric SNOMED-CT, HL7, ICD, and CPT codes that may be used in this measure. Second, it includes clarifications on what constitutes a numerator "hit" or a denominator exclusion based on questions that have arisen during technical assistance calls.

To access the official electronic specifications, visit the CMS Electronic Specifications page <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/ElectronicSpecifications.html> and locate the "EP Measure Specifications" zip file, which contains electronic specifications for all 44 Stage 1 Meaningful Use clinical quality measures.

TABLE OF CONTENTS

NQF 0088: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy.....	4
Technical Supplement.....	TS-1
Denominator Inclusion Criteria	TS-2
Exclusion/Exception Criteria	TS-2
Numerator Inclusion Criteria	TS-3
Types of codes required from your EHR for calculating this clinical quality measure.....	TS-4

NQF 0088: Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy

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.

Quick Facts	
Type of measure: core, alternate core, or menu?	<ul style="list-style-type: none"> Menu measure
Related to other measures?	<ul style="list-style-type: none"> Some of the information entered for this clinical quality measure also can be used for calculations in the following measures: <ul style="list-style-type: none"> Diabetic Retinopathy: Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care (NQF 0089)
Data required to identify the <u>denominator</u> (total cases eligible to be counted in measure)	<ul style="list-style-type: none"> Age Encounter code¹ Active diagnosis of diabetic retinopathy²
Data required to identify the <u>exceptions</u> or <u>exclusions</u>	<ul style="list-style-type: none"> Medical or patient reason procedure not done
Data required to identify the two <u>numerators</u> (cases in which the process or outcome being measure occurred)	<ul style="list-style-type: none"> Procedure code: Macular or fundus exam performed³, and Physical exam finding of macular edema, level of severity of retinopathy, or severity of retinopathy and macular edema³

Note: This document is meant to supplement and not replace the official electronic specifications for the measure. To access the official specifications, please visit: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/ElectronicSpecifications.html>

Key Clinical Activities		Planning Your EHR Documentation	
To-Do List	Why Needed?	Data Elements Needed	Responsible Person or Role
1. Confirm the patient's date of birth	<ul style="list-style-type: none"> Ensures only patients who are 18 to 75 years of age during the measurement period are included in the denominator. 	<ul style="list-style-type: none"> Date of birth 	

¹ This data element(s) must be documented during the measurement period

² This data element(s) must be documented prior to or during the encounter

³ This data element(s) must be documented during the encounter

Key Clinical Activities		Planning Your EHR Documentation	
To-Do List	Why Needed?	Data Elements Needed	Responsible Person or Role
2. Record the date(s) and type(s) of visit(s)	<ul style="list-style-type: none"> Ensures only appropriate visits are captured in the denominator. For this measure, at least two office and outpatient consult, ophthalmological services, nursing facility, or domiciliary encounters must take place during the measurement period. 	<ul style="list-style-type: none"> Date(s) of visit(s) Codes for an office and outpatient consult, ophthalmological services, nursing facility, or domiciliary encounters⁴ 	
3. Check patient record or assess patient for active diagnosis of diabetic retinopathy	<ul style="list-style-type: none"> Ensures only patients with an active diagnosis of diabetic retinopathy are captured in the denominator. 	<ul style="list-style-type: none"> Document diagnosis of diabetic retinopathy 	
4. Check patient record or assess patient for medical or patient reason not to perform macular or fundus exam.	<ul style="list-style-type: none"> Ensures patients with a medical or patient reason not to perform optic head nerve evaluation are identified as exclusions or exceptions. 	<ul style="list-style-type: none"> Record medical or patient reason for not performing optic head nerve evaluation, if any⁵ 	
5. Check patient record for documentation of macular or fundus exam and documentation of the level of severity of retinopathy. If no evidence found and if appropriate, order macular or fundus exam and record level of severity of retinopathy.	<ul style="list-style-type: none"> Ensures only patients with documentation of macular or fundus exam <u>and</u> documentation of either a) macular edema findings and level of severity of retinopathy findings or b) documentation of severity of retinopathy and macular edema findings are counted in the numerator. 	<ul style="list-style-type: none"> Document whether procedure performed⁶ Document whether macular edema findings and level of severity of retinopathy are recorded or if of severity of retinopathy and macular edema was recorded 	

⁴ See Technical Supplement for denominator inclusion criteria details (encounter types): [pp. TS-2](#)

⁵ See Technical Supplement for exclusion or exception details (medical or patient reason): [pp. TS-2](#)

⁶ See Technical Supplement for numerator inclusion details (macular or fundus exam procedure and findings): [pp. TS-3](#)

Technical Supplement

The following pages list the technical definitions of the codes that could be included in the calculation of this measure. Use these lists as needed to confirm that your clinical documentation includes item(s) that are on this list, where appropriate, to ensure accurate calculation of your quality measure denominator and numerator.

DENOMINATOR INCLUSION CRITERIA

What constitutes a domiciliary encounter? (CPT codes)

- Domiciliary or rest home visit for the evaluation and management of a new patient, which requires these 3 key components: a history; an examination; and medical decision making.
- Domiciliary or rest home visit for the evaluation and management of a new patient, which requires at least 2 of these 3 key components: a history; an examination; and medical decision making.

What constitutes an office and outpatient consult encounter? (CPT codes)

- Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: a history; an evaluation; and medical decision making.
- Office or other outpatient visit for the evaluation and management of an established patient, which requires at least 2 of these 3 key components: a history; an examination; and medical decision making.
- Office consultation for a new or established patient, which requires these 3 key components: a history; an examination; and medical decision making.

What constitutes a nursing facility encounter? (CPT codes)

- Initial nursing facility care, per day, for the evaluation and management of a patient, which requires these 3 key components: a history; an examination; and medical decision making.
- Subsequent nursing facility care, per day, for the evaluation and management of a patient, which requires at least 2 of these 3 key components: a history; an examination; and medical decision making.

What constitutes an ophthalmological services encounter? (CPT codes)

- Ophthalmological services: medical examination and evaluation with initiation of diagnostic and treatment program; new patient
- Ophthalmological services: medical examination and evaluation, with initiation or continuation of diagnostic and treatment program; established patient

EXCLUSION/EXCEPTION CRITERIA

What constitutes a medical reason for procedure not done? (HL7 codes)

- The therapy has been found to not have the desired therapeutic benefit on the patient.
- The underlying condition has been resolved or has evolved such that a different treatment is no longer needed.
- A new therapy will be commenced when current supply exhausted.
- Testing has shown that the patient already has immunity to the agent targeted by the immunization.
- The patient currently has a medical condition for which the vaccine is contraindicated or for which precaution is warranted.
- The prescribed product has specific clinical release or other therapeutic characteristics not shared by other substitutable medications.
- The patient has an intolerance to the medication.
- Patient has had a prior allergic intolerance response to alternate product or one of its components.
- The specific manufactured drug is part of a clinical trial.
- Contraindication identified

What constitutes a patient reason for procedure not done? (HL7 codes)

- The Patient requested the action
- Moved at the request of the patient.

What constitutes a patient reason for procedure not done? (HL7 codes)

- Client deceased.
- The patient is not (or is no longer) able to use the medication in a manner prescribed. Example: Can't swallow.
- The patient refused to take the product.
- The patient or their guardian objects to receiving the vaccine on religious grounds.
- The patient or their guardian objects to receiving the vaccine because of concerns over its safety.
- The intended vaccine has expired or is otherwise believed to no longer be effective. Example: Due to temperature exposure.
- Patient has compliance issues with medication such as differing appearance, flavor, size, shape or consistency.
- Patient changed their mind regarding obtaining medication

NUMERATOR INCLUSION CRITERIA

What constitutes a macular or fundus exam? (SNOMED-CT codes)

- Slit lamp fundus examination (procedure)

What constitutes a physical exam finding of macular edema? (SNOMED-CT codes)

- Advanced diabetic maculopathy (disorder)
- Autosomal dominant cystoid macular edema (disorder)
- Clinically significant macular edema (disorder)
- Cystoid macular edema (disorder)
- Diabetic macular edema (disorder)
- Diabetic macular edema not clinically significant (disorder)
- Diabetic maculopathy (disorder)
- Diffuse diabetic maculopathy (disorder)
- Exudative maculopathy associated with type I diabetes mellitus (disorder)
- Exudative maculopathy associated with type II diabetes mellitus (disorder)
- Focal diabetic maculopathy (disorder)
- Ischemic diabetic maculopathy (disorder)
- Macular retinal edema (disorder)
- Mixed diabetic maculopathy (disorder)
- Noncystoid edema of macula of retina (disorder)
- On examination - clinically significant macular edema of left eye (disorder)
- On examination - clinically significant macular edema of right eye (disorder)
- On examination - left eye diabetic maculopathy (disorder)
- On examination - right eye diabetic maculopathy (disorder)
- Postoperative cystoid macular edema (disorder)
- Uveitis related cystoid macular edema (disorder)

What constitutes a physical exam finding of level of severity of retinopathy? (SNOMED-CT codes)

- Mild non-proliferative diabetic retinopathy (disorder)
- Moderate nonproliferative diabetic retinopathy (disorder)
- Nonproliferative diabetic retinopathy (disorder)

What constitutes a physical exam finding of level of severity of retinopathy? (SNOMED-CT codes)

- On examination - left eye preproliferative diabetic retinopathy (disorder)
- On examination - right eye preproliferative diabetic retinopathy (disorder)
- Proliferative diabetic retinopathy (disorder)
- Severe nonproliferative diabetic retinopathy (disorder)

What constitutes a physical exam finding of level of severity of retinopathy and macular edema? (SNOMED-CT codes)

- Non-high-risk proliferative diabetic retinopathy with clinically significant macular edema (disorder)
- Proliferative diabetic retinopathy - high risk with clinically significant macular edema (disorder)
- Severe nonproliferative diabetic retinopathy with clinically significant macular edema (disorder)
- Severe nonproliferative diabetic retinopathy with no macular edema (disorder)
- Very severe nonproliferative diabetic retinopathy with clinically significant macular edema (disorder)

TYPES OF CODES REQUIRED FROM YOUR EHR FOR CALCULATING THIS CLINICAL QUALITY MEASURE

NQF0088	CPT	CPT Modifier	CVX	Grouping	HCPSCS	HL7	ICD-9*	ICD-10	LOINC	RxNorm	SNOMED*
Numerator ¹											×
Denominator ²	×			×		×	×	×			×
Exceptions or exclusions ³						×					

- Codes with an asterisk (*) are required from certified EHRs.
- ¹ To identify the numerator in this CQM, the following standard codes are required: (1) a "procedure" code from SNOMED, AND (2) a "physical exam finding code" from SNOMED-CT, AND (3) "encounter" codes from CPT
- ² To identify the denominator in this CQM, the following standard codes are required: (1) an "individual characteristic" code from HL7, AND (2) "encounter" codes from CPT, AND (3) a "diagnosis/condition/problem" code for diabetic retinopathy from ICD-9, ICD-10, or GROUPING.
- ³ To identify the exclusions in this CQM, the following standard code is required: (1) a "negation reason" code from HL7.

Abbreviation	Long Name	Definition/Description
CPT	Current Procedural Terminology	The CPT (Current Procedural Terminology) is produced by the American Medical Association (AMA). CPT codes are used to report medical procedures and services. (Source: CDC)
CVX	Codes for Vaccine Administered	This vocabulary provides terminology for Vaccine Administered. The vocabulary is defined in Health Level Seven (HL7) Version 2.5.1. (Source: USHIK)

Abbreviation	Long Name	Definition/Description
HCPCS	Healthcare Common Procedure Coding System	Level I of the HCPCS is comprised of CPT (Current Procedural Terminology), a numeric coding system maintained by the American Medical Association (AMA). Level II of the HCPCS is a standardized coding system that is used primarily to identify products, supplies, and services not included in the CPT codes, such as ambulance services and durable medical equipment, prosthetics, orthotics, and supplies (DMEPOS) when used outside a physician's office. (Source: CMS)
HL7	Health Level Seven	HL7 is an accredited ANSI standard organization that produces the HL7 messaging standard. It is the accepted messaging standard for communicating clinical data. It is supported by every major medical informatics system vendor in the US. (Source: ASPE)
ICD-9	International Statistical Classification of Diseases and Related Health Problems, 9th revision	The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) is based on the World Health Organization's Ninth Revision, International Classification of Diseases (ICD-9). ICD-9-CM is the official system of assigning codes to diagnoses and procedures associated with hospital utilization in the United States. The ICD-9 is used to code and classify mortality data from death certificates. (Source: CDC)
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision	The International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), published by the World Health Organization (WHO), is the foundation of ICD-10-CM. ICD-10 continues to be the classification used in cause-of-death coding in the United States. The ICD-10-CM is comparable with the ICD-10 (Source: CDC)
LOINC	Logical Observation Identifiers Names and Codes	A universal code system for identifying laboratory and clinical observations. (Source: LOINC)
RxNorm	RxNorm	RxNorm provides normalized names for clinical drugs and links its names to many of the drug vocabularies commonly used in pharmacy management and drug interaction software, including those of First Databank, Micromedex, MediSpan, Gold Standard Alchemy, and Multum. By providing links between these vocabularies, RxNorm can mediate messages between systems not using the same software and vocabulary. (Source: NLM NIH)
SNOMED-CT	Systematic Nomenclature of Medicine - Clinical Terms	SNOMED CT (Systematized Nomenclature of Medicine--Clinical Terms) is a comprehensive clinical terminology, originally created by the College of American Pathologists (CAP) and, as of April 2007, owned, maintained, and distributed by the International Health Terminology Standards Development Organisation (IHTSDO), a not-for-profit association in Denmark. (Source: NLM NIH)

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