

## Comprehensive Diabetes Care (CDC)

### Description

The percentage of members 18–75 years of age with diabetes (type 1 and type 2) who had each of the following.

- Hemoglobin A1c (HbA1c) testing
- HbA1c poor control (>9.0%)
- HbA1c control (<8.0%) (*first-year indicator*)
- HbA1c control (<7.0%) (*first-year indicator*)\*
- Eye exam (retinal) performed
- LDL-C screening
- LDL-C control (<100 mg/dL)
- Medical attention for nephropathy
- Blood pressure control (<130/80 mm Hg)
- Blood pressure control (<140/90 mm Hg)

\*Additional exclusion criteria are required for this indicator.

### Eligible Population

<b>Product lines</b>	Commercial, Medicaid, Medicare (report each product line separately).
<b>Ages</b>	18–75 years as of December 31 of the measurement year.
<b>Continuous enrollment</b>	The measurement year.
<b>Allowable gap</b>	No more than one gap in enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
<b>Anchor date</b>	December 31 of the measurement year.
<b>Benefit</b>	Medical.
<b>Event/diagnosis</b>	Two methods identify members with diabetes: pharmacy data and claim/encounter data. The organization must use both to identify the eligible population, but a member only needs to be identified in one to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.  <i>Pharmacy data.</i> Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Table CDC-A).

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**Table CDC-A: Prescriptions to Identify Members With Diabetes**

Description	Prescription			
Alpha-glucosidase inhibitors	• acarbose	• miglitol		
Amylin analogs	• pramlintide			
Antidiabetic combinations	• glimepiride-pioglitazone • glimepiride-rosiglitazone • glipizide-metformin • glyburide-metformin		• metformin-pioglitazone • metformin-rosiglitazone • metformin-sitagliptin	
Insulin	• insulin aspart • insulin aspart-insulin aspart protamine • insulin detemir • insulin glargine • insulin glulisine • insulin inhalation • insulin isophane beef-pork • insulin isophane human • insulin isophane pork • insulin isophane-insulin regular		• insulin lispro • insulin lispro-insulin lispro protamine • insulin regular beef-pork • insulin regular human • insulin regular pork • insulin zinc beef-pork • insulin zinc extended human • insulin zinc human • insulin zinc pork	
Meglitinides	• nateglinide	• repaglinide		
Miscellaneous antidiabetic agents	• exenatide	• pramlintide	• sitagliptin	
Sulfonylureas	• acetohexamide • chlorpropamide	• glimepiride • glipizide	• glyburide • tolazamide	• tolbutamide
Thiazolidinediones	• pioglitazone	• rosiglitazone		

**Note:** *Glucophage/metformin is not included because it is used to treat conditions other than diabetes; members with diabetes on these medications are identified through diagnosis coding only. NCQA will provide a complete list of medications and NDC codes on its Web site ([www.ncqa.org](http://www.ncqa.org)) by November 14, 2008.*

*Claim/encounter data.* Members who had two face-to-face encounters with a diagnosis of diabetes (Table CDC-B) on different dates of service in an outpatient setting or nonacute inpatient setting, or one face-to-face encounter in an acute inpatient or ED setting during the measurement year or the year prior to the measurement year. The organization may count services that occur over both years. Refer to Table CDC-C for codes to identify visit type.

**Table CDC-B: Codes to Identify Diabetes**

Description	ICD-9-CM Diagnosis
Diabetes	250, 357.2, 362.0, 366.41, 648.0

Table CDC-C: Codes to Identify Visit Type

Description	CPT	UB Revenue
Outpatient	92002, 92004, 92012, 92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456	051x, 0520-0523, 0526-0529, 057x-059x, 077x, 082x-085x, 088x, 0982, 0983
Nonacute inpatient	99301-99313, 99315, 99316, 99318, 99321-99328, 99331-99337	0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x
Acute inpatient	99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, 99291	010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x-022x, 072x, 080x, 0987
ED	99281-99285	045x, 0981

### Administrative Specification

**Denominator** The eligible population.

**Required exclusions for the HbA1c control <7% indicator**

For the HbA1c control <7% indicator, exclude members who meet any of the following criteria.

- 65–75 years of age as of December 31 of the measurement year.
- Coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA). Members discharged alive for CABG or PTCA in the measurement year or the year prior to the measurement year. Use the codes listed in Table CMC-A to identify PTCA and CABG. CABG cases should be from inpatient claims only. Include all cases of PTCA, regardless of setting (e.g., inpatient, outpatient, ED).
- Ischemic vascular disease (IVD). Members who met at least one of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.
  - At least one outpatient visit (Table CMC-C) with an IVD diagnosis (Table CMC-B), or
  - At least one acute inpatient visit (Table CMC-C) with an IVD diagnosis (Table CMC-B)
- Chronic heart failure (CHF). Members who had at least one encounter, in any setting, with any code to identify Chronic Heart Failure (Table RCA-A). Look as far back as possible in the member's history through December 31 of the measurement year.
- Prior myocardial infarction (MI). Members who had at least one encounter, in any setting, with any code to identify MI (Table CDC-P). Look as far back as possible in the member's history through December 31 of the measurement year.
- Chronic renal failure (CRF)/end-stage renal disease (ESRD). Members who had at least one encounter, in any setting, with any code to identify ESRD (Table CDC-P). Look as far back as possible in the member's history through December 31 of the measurement year.

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- Dementia. Members who had at least one encounter, in any setting, with any code to identify dementia (Table DDE-E). Look as far back as possible in the member's history through December 31 of the measurement year.
- Blindness. Members who had at least one encounter, in any setting, with any code to identify blindness (Table CDC-P). Look as far back as possible in the member's history through December 31 of the measurement year.
- Amputation (lower extremity). Members who had at least one encounter, in any setting, with any code to identify lower extremity amputation (Table CDC-P). Look as far back as possible in the member's history through December 31 of the measurement year.

**Table CDC-P: Codes to Identify Required Exclusions**

Description	CPT	HCPCS	ICD-9-CM Diagnosis	ICD-9-CM Procedure	UB Revenue	UB Type of Bill	POS
<u>Myocardial infarction</u>			<u>410, 412</u>				
<u>ESRD (including renal dialysis)</u>	<u>36145, 36800-36821, 36831-36833, 90919-90921, 90923-90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512</u>	<u>G0257, G0311-G0319, G0321-G0323, G0325-G0327, G0392, G0393, S9339</u>	<u>585.4, 585.5, 585.6, V42.0, V45.1, V56</u>	<u>38.95, 39.27, 39.42, 39.43, 39.53, 39.93, 39.94, 39.95, 54.98</u>	<u>080x, 082x-085x, 088x</u>	<u>72x</u>	<u>65</u>
<u>Blindness</u>			<u>369.0, 369.1, 369.2, 369.4, 369.6, 369.7</u>				
<u>Amputation (lower extremity)</u>	<u>27290, 27295, 27590-27592, 27594, 27596, 27598, 27880, 27881, 27882, 27884, 27886, 27888, 27889, 28800, 28805, 28810, 28820, 28825</u>			<u>84.1</u>			

**Numerators**

**HbA1c testing** An HbA1c test performed during the measurement year, as identified by claim/ encounter or automated laboratory data. Use any code listed in Table CDC-D.

**Table CDC-D: Codes to Identify HbA1c Tests**

CPT	CPT Category II	LOINC
83036, 83037	3044F, 3045F, 3046F, 3047F	4548-4, 4549-2, 17856-6

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**HbA1c poor control >9%** Use automated laboratory data to identify the *most recent* HbA1c test during the measurement year. The member is numerator compliant if the most recent automated HbA1c level is >9.0% or is missing a result or if an HbA1c test was not done during the measurement year. The member is not numerator compliant if the automated result for the most recent HbA1c test during the measurement year is ≤9.0%.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-E and use the most recent code during the measurement year to evaluate whether the member is numerator compliant (3046F indicates the member is numerator compliant; 3044F, 3045F, 3047F indicate the member is not numerator compliant).

**Note:** For this indicator, a lower rate indicates better performance (i.e., low rates of poor control indicate better care).

**Table CDC-E: Codes to Identify HbA1c Levels >9%**

Description	CPT Category II
Numerator compliant (HbA1c >9.0%)	3046F
Not numerator compliant (HbA1c ≤9.0%)	3044F, 3045F, 3047F

**HbA1c control <8%** Use automated laboratory data to identify the *most recent* HbA1c test during the measurement year. The member is numerator compliant if the most recent automated HbA1c level is <8.0%. The member is not numerator compliant if the automated result for the most recent HbA1c test is ≥8.0% or is missing a result, or if an HbA1c test was not done during the measurement year.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-Q and use the most recent code during the measurement year to evaluate whether the member is numerator compliant.

**Table CDC-Q: Codes to Identify HbA1c Levels <8%**

Description	CPT Category II
Numerator compliant (HbA1c <8.0%)	3044F
Not numerator compliant (HbA1c ≥8.0%)	3045F*, 3046F, 3047F**

\* CPT Category II code 3045F indicates most recent hemoglobin A1c (HbA1c) level 7.0 - 9.0 % and is not specific enough to denote numerator compliance for this indicator. For members with this code, the organization may elect to use other sources (laboratory data, hybrid reporting method) to determine if the HbA1c result was less than 8%.

\*\*CPT Category II code 3047F indicates HbA1c ≤9% and is not specific enough to denote numerator compliance for this indicator. For members with this code, the organization may elect to use other sources (laboratory data, hybrid reporting method) to determine if the HbA1c result was less than 8%.

**HbA1c control <7%** Use automated laboratory data to identify the *most recent* HbA1c test during the measurement year. The member is numerator compliant if the most recent automated HbA1c level is <7.0%. The member is not numerator compliant if the automated result for the most recent HbA1c test is ≥7.0% or is missing a result, or if an HbA1c test was not done during the measurement year.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-F and use the most recent code during the measurement year to evaluate whether the member is numerator compliant (3044F indicates the member is numerator compliant; 3045F, 3046F, 3047F indicate the member is not numerator compliant).

**Note:** This indicator uses the eligible population with additional eligible population criteria (i.e., removing members with comorbid conditions.)

**Table CDC-F: Codes to Identify HbA1c Levels <7%**

Description	CPT Category II
Numerator compliant (HbA1c <7.0%)	3044F
Not numerator compliant (HbA1c ≥7.0%)	3045F, 3046F, 3047F*

\* CPT Category II code 3047F indicates HbA1c ≤9% and is not specific enough to denote numerator compliance for this indicator. For members with this code, the organization may elect to use other sources (laboratory data, hybrid reporting method) to determine if the HbA1c result was less than 7%.

**Eye exam** An eye screening for diabetic retinal disease as identified by administrative data. This includes diabetics who had one of the following.

- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year, **or**
- A *negative* retinal exam (no evidence of retinopathy) by an eye care professional in the year prior to the measurement year

Refer to Table CDC-G for codes to identify eye exams. For exams performed in the year prior to the measurement year, a result must be available.

**Table CDC-G: Codes to Identify Eye Exams\***

CPT	CPT Category II**	HCPCS	ICD-9-CM Diagnosis	ICD-9-CM Procedure
67028, 67030, 67031, 67036, 67038-67043, 67101, 67105, 67107, 67108, 67110, 67112, 67113, 67121, 67141, 67145, 67208, 67210, 67218, 67220, 67221, 67227, 67228, 92002, 92004, 92012, 92014, 92018, 92019, 92225, 92226, 92230, 92235, 92240, 92250, 92260, 99203-99205, 99213-99215, 99242-99245	2022F, 2024F, 2026F, 3072F***	S0620, S0621, S0625**, S3000	V72.0	14.1-14.5, 14.9, 95.02-95.04, 95.11, 95.12, 95.16

- \* Eye exams provided by eye care professionals are a proxy for dilated eye examinations because there is no administrative way to determine that a dilated exam was performed.
- \*\* The organization does not need to limit CPT Category II codes or HCPCS S0625 to an optometrist or an ophthalmologist. These codes indicate an eye exam was performed by an eye care professional.
- \*\*\* CPT Category II code 3072F can only be used if the claim/encounter was during the measurement year because it indicates the member had “no evidence of retinopathy in the prior year.” Additionally, because the code definition itself indicates results were negative, an automated result is not required.

**LDL-C screening** An LDL-C test performed during the measurement year, as identified by claim/ encounter or automated laboratory data. Use any code listed in table CDC-H.

Organizations may use a calculated LDL for LDL-C screening and control indicators.

**Table CDC-H: Codes to Identify LDL-C Screening**

CPT	CPT Category II	LOINC
80061, 83700, 83701, 83704, 83721	3048F, 3049F, 3050F	2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 24331-1, 39469-2, 49132-4

**LDL-C control <100 mg/dL** Use automated laboratory data to identify the *most recent* LDL-C test during the measurement year. The member is numerator compliant if the most recent automated LDL-C level is <100 mg/dL. If the automated result for the most recent LDL-C test during the measurement year is  $\geq 100$  mg/dL or is missing, or if an LDL-C test was not done during the measurement year, the member is not numerator compliant.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-I and use the most recent code during the measurement year to evaluate whether the member is numerator compliant. Use Table CDC-I to determine compliance (3048F indicates the member is numerator compliant; 3049F, 3050F indicate the member is not numerator compliant).

**Table CDC-I: Codes to Identify LDL-C Levels**

Description	CPT Category II
Numerator compliant (LDL-C <100 mg/dL)	3048F
Not numerator compliant (LDL-C $\geq 100$ mg/dL)	3049F, 3050F

**Medical attention for nephropathy** A nephropathy screening test **or** evidence of nephropathy, as documented through administrative data.

**Note:** A process flow diagram is included at the end of this specification to help implement this specification.

**Nephropathy screening test** A nephropathy screening test during the measurement year (Table CDC-J).

**Table CDC-J: Codes to Identify Nephropathy Screening Tests**

Description	CPT	CPT Category II	LOINC
Nephropathy screening test	82042, 82043, 82044, 84156	3060F, 3061F	1753-3, 1754-1, 1755-8, 1757-4, 2887-8, 2888-6, 2889-4, 2890-2, 9318-7, 11218-5, 12842-1, 13801-6, 14956-7, 14957-5, 14958-3, 14959-1, 13705-9, 14585-4, 18373-1, 20621-9, 21059-1, 21482-5, 26801-1, 27298-9, 30000-4, 30001-2, 30003-8, 32209-9, 32294-1, 32551-4, 34366-5, 34535-5, 35663-4, 40486-3, 40662-9, 40663-7, 43605-5, 43606-3, 43607-1, 44292-1

**Evidence of nephropathy**

Any of the following meet criteria for evidence of nephropathy.

- A claim/encounter with a code to indicate evidence of treatment for nephropathy (Table CDC-K) during the measurement year.
- A nephrologist visit during the measurement year, as identified by the organization's specialty provider codes (no restriction on the Diagnosis or Procedural code submitted).
- A *positive* urine macroalbumin test in the measurement year, as documented by claim/encounter or automated laboratory data. Refer to Table CDC-K for codes to identify urine macroalbumin tests. "Trace" urine macroalbumin test results are not considered numerator compliant.
- Evidence of ACE inhibitor/ARB therapy during the measurement year. Members who had a claim indicating therapy (Table CDC-K) or received an ambulatory prescription or were dispensed an ambulatory prescription for ACE inhibitors or ARBs during the measurement year are compliant. Table CDC-L lists the ACE inhibitors/ARBs included in this measure.

**Table CDC-K: Codes to Identify Evidence of Nephropathy**

Description	CPT	CPT Category II*	HCPCS	ICD-9-CM Diagnosis	ICD-9-CM Procedure	UB Revenue	UB Type of Bill	POS	LOINC
Urine macroalbumin test*	81000-81003, 81005	3062F							5804-0, 20454-5, 24356-8, 24357-6
Evidence of treatment for nephropathy	36145, 36800, 36810, 36815, 36818, 36819-36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90920, 90921, 90924, 90925, 90935, 90937, 90939, 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512	3066F	G0257, G0314-G0319, G0322, G0323, G0326, G0327, G0392, G0393, S9339	250.4, 403, 404, 405.01, 405.11, 405.91, 580-588, 753.0, 753.1, 791.0, V42.0, V45.1, V56	38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, 55.4-55.6	0367, 080x, 082x-085x, 088x	72x	65	
ACE inhibitor/ARB therapy		4009F							

\*A CPT Category II code indicates a positive result for urine macroalbumin; the organization must use automated laboratory data to confirm a positive result for tests identified by CPT or LOINC codes.

**Table CDC-L: ACE Inhibitors/ARBs**

Description	Prescription
Angiotensin converting enzyme inhibitors	<ul style="list-style-type: none"> <li>• benazepril</li> <li>• enalapril</li> <li>• lisinopril</li> <li>• perindopril</li> <li>• ramipril</li> <li>• captopril</li> <li>• fosinopril</li> <li>• moexipril</li> <li>• quinapril</li> <li>• trandolapril</li> </ul>
Angiotensin II inhibitors	<ul style="list-style-type: none"> <li>• candesartan</li> <li>• irbesartan</li> <li>• olmesartan</li> <li>• valsartan</li> <li>• eprosartan</li> <li>• losartan</li> <li>• telmisartan</li> </ul>
Antihypertensive combinations	<ul style="list-style-type: none"> <li>• amlodipine-benazepril</li> <li>• benazepril-hydrochlorothiazide</li> <li>• candesartan-hydrochlorothiazide</li> <li>• captopril-hydrochlorothiazide</li> <li>• enalapril-hydrochlorothiazide</li> <li>• eprosartan-hydrochlorothiazide</li> <li>• fosinopril-hydrochlorothiazide</li> <li>• hydrochlorothiazide-irbesartan</li> <li>• hydrochlorothiazide-lisinopril</li> <li>• hydrochlorothiazide-losartan</li> <li>• hydrochlorothiazide-moexipril</li> <li>• hydrochlorothiazide-olmesartan</li> <li>• hydrochlorothiazide-quinapril</li> <li>• hydrochlorothiazide-telmisartan</li> <li>• hydrochlorothiazide-valsartan</li> <li>• trandolapril-verapamil</li> </ul>

**Note:** NCQA will provide a comprehensive list of medications and NDC codes on its Web site ([www.ncqa.org](http://www.ncqa.org)) by November 14, 2008.

**Blood pressure control <130/80 mm Hg** Use automated data to identify the most recent BP reading during the measurement year.

The member is numerator compliant if the BP is <130/80 mm Hg. The member is not compliant if the BP is  $\geq$ 130/80 mm Hg or if there is no automated BP reading during the measurement year. If there are multiple BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-M and use the most recent codes during the measurement year to evaluate whether the member is numerator compliant for both systolic and diastolic levels.

**Table CDC-M: Codes to Identify Systolic and Diastolic BP Levels <130/80**

Description	CPT Category II	
	Systolic	Diastolic
Numerator compliant (BP <130/80 mm Hg)	3074F	3078F
Not numerator compliant (BP $\geq$ 130/80 mm Hg)	3075F, 3077F	3079F, 3080F

**Blood pressure control <140/90 mm Hg** Use automated data to identify the most recent BP reading during the measurement year. Refer to Table CDC-N and use the most recent code to evaluate whether the member is numerator compliant.

The member is numerator compliant if the BP is <140/90 mm Hg. The member is not compliant if the BP is  $\geq$ 140/90 mm Hg or if there is no automated BP reading during the measurement year. If there are multiple BPs on the same date of service, use the lowest systolic and lowest diastolic BP on that date as the representative BP.

An organization that uses CPT Category II codes to identify numerator compliance for this indicator must search for all codes in Table CDC-N and use the most recent codes during the measurement year to evaluate whether the member is numerator compliant for both systolic and diastolic levels.

**Table CDC-N: Codes to Identify Systolic and Diastolic BP Levels <140/90**

Description	CPT Category II	
	Systolic	Diastolic
Numerator compliant (BP <140/90 mm Hg)	3074F, 3075F, 3076F	3078F, 3079F
Not numerator compliant (BP $\geq$ 140/90 mm Hg)	3077F	3080F

**Hybrid Specification****Denominator**

A systematic sample of 548 drawn from the eligible population for each product line. A sample size of 548 is based on the goal of achieving a sample of at least 411 for the HbA1c <7% denominator after required exclusions.

Members who meet the required exclusion criteria for the HbA1c <7% indicator should not be substituted with members from the oversample. These members will only be excluded when reporting the denominator for the HbA1c <7% indicator. In other words, organizations should report the FSS for the HbA1c <7% indicator as 548 minus the required exclusions.

**Required  
exclusions for the  
HbA1c control  
<7% indicator**

For the HbA1c control <7% indicator, exclude members who meet any of the following criteria.

**Administrative**

Refer to the Administrative Specification to identify required exclusions from administrative data.

**Medical record**

For the HbA1c control <7% indicator, exclude members who meet any of the following criteria.

- 65–75 years of age as of December 31 of the measurement year.
- CABG or PTCA. Dated documentation of CABG or PTCA in the measurement year or the year prior to the measurement year.
- IVD. Documentation of an IVD diagnosis. Look as far back as possible in the member's history through December 31 of the measurement year. Appropriate diagnoses include:
  - IVD
  - Ischemic heart disease
  - Angina
  - Coronary atherosclerosis
  - Coronary artery occlusion
  - Cardiovascular disease
  - Occlusion or stenosis of precerebral arteries (including basilar, carotid and vertebral arteries)
  - Atherosclerosis of renal artery
  - Atherosclerosis of native arteries of the extremities
  - Chronic total occlusion of artery of the extremities
  - Arterial embolism and thrombosis
  - Atheroembolism
- CHF. Documentation of CHF diagnosis. Look as far back as possible in the member's history through December 31 of the measurement year.
- Prior MI. Documentation of prior MI. Look as far back as possible in the member's history through December 31 of the measurement year.
- CRF/ESRD. Documentation of CRF or ESRD. Look as far back as possible in the member's history through December 31 of the measurement year.
- Dementia. Documentation of dementia. Look as far back as possible in the member's history through December 31 of the measurement year.

- Blindness. Documentation of blindness in one or both eyes. Look as far back as possible in the member's history through December 31 of the measurement year.
- Amputation (lower extremity). Documentation of lower extremity amputation. Look as far back as possible in the member's history through December 31 of the measurement year.

**Numerators**

**HbA1c testing** An HbA1c test performed during the measurement year as identified by administrative data or medical record review.

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in the medical record must include a note indicating the date on which the HbA1c test was performed and the result. The organization may count notation of the following in the medical record.

- A1c
- Hemoglobin A1c
- HgbA1c
- HbA1c
- Glycohemoglobin A1c

**HbA1c poor control >9%** The *most recent* HbA1c level (performed during the measurement year) is >9.0% or is missing or was not done during the measurement year, as documented through automated laboratory data or medical record review.

**Note:** For this indicator, a lower rate indicates better performance (i.e., low rates of poor control indicate better care).

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in the medical record must include a note indicating the date on which the HbA1c test was performed and the result.

**HbA1c control <8%** The *most recent* HbA1c level (performed during the measurement year) is <8.0% as identified by automated laboratory data or medical record review.

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in medical record must include a note indicating the date on which the HbA1c test was performed and the result.

**HbA1c control <7%** The *most recent* HbA1c level (performed during the measurement year) is <7.0% as identified by automated laboratory data or medical record review.

**Note:** This indicator uses the eligible population with additional eligible population criteria (i.e., removing members with comorbid conditions.)

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in medical record must include a note indicating the date on which the HbA1c test was performed and the result.

- Eye exam** An eye screening for diabetic retinal disease as identified by administrative data or medical record review. This includes diabetics who had one of the following.
- A retinal or dilated eye exam by an eye care professional (optometrist or ophthalmologist) in the measurement year, **or**
  - A *negative* retinal exam (no evidence of retinopathy) by an eye care professional in the year prior to the measurement year

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in the medical record must include one of the following.

- A note or letter prepared by an ophthalmologist, optometrist, PCP or other health care professional indicating that an ophthalmoscopic exam was completed by an eye care professional, the date on which the procedure was performed and the results, **or**
- A chart or photograph of retinal abnormalities indicating the date on which the fundus photography was performed and evidence that an eye care professional reviewed the results. Alternatively, results may be read by a qualified reading center that operates under the direction of a medical director who is a retinal specialist.

**LDL-C screening** An LDL-C test performed during the measurement year as identified by claim/encounter or automated laboratory data or medical record review.

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** At a minimum, documentation in the medical record must include a note indicating the date on which the LDL-C test was performed and the result. The organization may use a calculated LDL for LDL-C screening and control indicators.

**LDL-C control <100 mg/dL** The *most recent* LDL-C level performed during the measurement year is <100 mg/dL, as documented through automated laboratory data or medical record review.

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** Documentation in medical record must include, at a minimum, a note indicating the date on which the LDL-C test was performed and the result.

The organization may calculate LDL-C levels from total cholesterol, HDL-C and triglycerides using the Friedewald equation if the triglycerides are  $\leq 400$  mg/dL.

$$(\text{LDL-C}) = (\text{total cholesterol}) - (\text{HDL}) - (\text{triglycerides}/5)$$

If lipoprotein (a) is measured, use the following calculation.

$$(\text{LDL-C}) = (\text{total cholesterol}) - (\text{HDL}) - (\text{triglycerides}/5) - 0.3 [\text{lipoprotein (a)}]$$

These formulae are used when all levels are expressed in mg/dL and cannot be used if triglycerides >400 mg/dL.

**Medical attention for nephropathy**

A nephropathy screening test during the measurement year **or** evidence of nephropathy during the measurement year as documented through either administrative data or medical record review.

**Note:** A process flow diagram is included at the end of this specification to help implement this specification.

**Administrative**

Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record**

Nephropathy screening test. At a minimum, documentation must include a note indicating the date on which a urine microalbumin test was performed, and the result. Any of the following meet criteria for a urine microalbumin test.

- 24-hour urine for microalbumin
- Timed urine for microalbumin
- Spot urine for microalbumin
- Urine for microalbumin/creatinine ratio
- 24-hour urine for total protein
- Random urine for protein/creatinine ratio

Evidence of nephropathy. Any of the following meet criteria for evidence of nephropathy.

- Documentation of a visit to a nephrologist
- Documentation of medical attention for any of the following (no restriction on provider type)
  - Diabetic nephropathy
  - ESRD
  - CRF
  - Chronic kidney disease (CKD)
  - Renal insufficiency
  - Proteinuria
  - Albuminuria
  - Renal dysfunction
  - Acute renal failure (ARF)
  - Dialysis, hemodialysis or peritoneal dialysis
- A positive urine macroalbumin test. At a minimum, documentation in medical record must include a note indicating the date on which the test was performed, and a positive result. Any of the following meet criteria for a positive urine macroalbumin test.
  - Positive urinalysis (random, spot or timed) for protein
  - Positive urine (random, spot or timed) for protein
  - Positive urine dipstick for protein
  - Positive tablet reagent for urine protein
  - Positive result for albuminuria
  - Positive result for macroalbuminuria
  - Positive result for proteinuria
  - Positive result for gross proteinuria

**Note:** “Trace” urine macroalbumin test results are not considered numerator compliant.

- Evidence of ACE inhibitor/ARB therapy. Documentation in medical record must include, at minimum, a note indicating that the member received an ambulatory prescription for ACE inhibitors/ARBs within the measurement year.

**Blood pressure control <130/80 mm Hg** The *most recent* BP level (taken during the measurement year) is <130/80 mm Hg, as documented through administrative data or medical record review.

**Blood pressure control <140/90 mm Hg** The *most recent* BP level (taken during the measurement year) is <140/90 mm Hg, as documented through administrative data or medical record review.

**Administrative** Refer to the Administrative Specification to identify positive numerator hits from administrative data.

**Medical record** To determine if BP is adequately controlled, the organization must identify the representative BP following the steps below.

***Identifying the medical record*** The organization should use the medical record from which it abstracts data for the other CDC indicators. If the organization does not abstract for other indicators, it should use the medical record of the provider that manages the member’s diabetes. If that medical record does not contain a BP, the organization may use the medical record of another PCP or specialist from which the member receives care.

**Step 1** Identify the most recent BP reading notated during the measurement year. Do not include BP readings that meet the following criteria.

- BPs taken during an acute inpatient stay or an ED visit
- BPs taken during an outpatient visit which was for the sole purpose of having a diagnostic test or surgical procedure performed (e.g., sigmoidoscopy, removal of a mole)
- BPs obtained the same day as a major diagnostic or surgical procedure (e.g., stress test, administration of IV contrast for a radiology procedure, endoscopy)
- BP readings taken by the member

**Step 2** Identify the lowest systolic and lowest diastolic BP reading from the most recent BP notation in the medical record. If there are multiple BPs recorded for a single date, use the lowest systolic and lowest diastolic BP on that date as the representative BP. The systolic and diastolic results do not need to be from the same reading.

### **Exclusions (optional)**

- Members with a diagnosis of polycystic ovaries (Table CDC-O) who did not have any face-to-face encounters with a diagnosis of diabetes (CDC-B), in any setting, during the measurement year or the year prior to the measurement year. Diagnosis can occur at any time in the member’s history, but must have occurred by December 31 of the measurement year.
- Members with gestational or steroid-induced diabetes (CDC-O) who did not have any face-to-face encounters with a diagnosis of diabetes (CDC-B), in any setting, during the measurement year or the year prior to the measurement year. Diagnosis can occur during the measurement year or the year prior to the measurement year, but must have occurred by December 31 of the measurement year.

**Table CDC-O: Codes to Identify Exclusions**

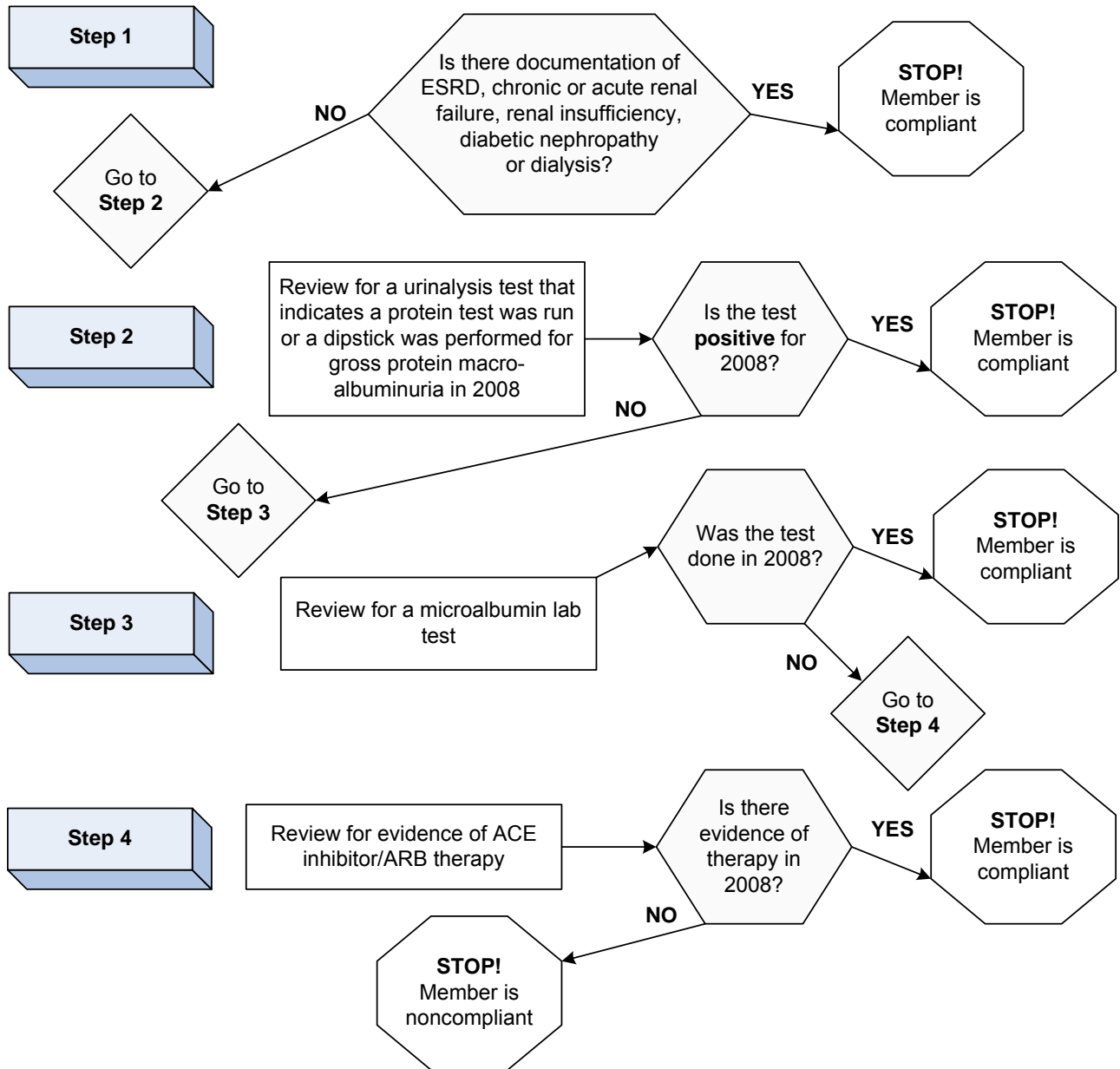
Description	ICD-9-CM Diagnosis
Polycystic ovaries	256.4
Steroid induced	251.8, 962.0
Gestational diabetes	648.8

**Note**

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- *The organization may select data collection method (Administrative vs. Hybrid) at the indicator level, but the method for screening and control rates must be consistent, as must the methodology for BP control indicators.*
- *Blindness is not an exclusion for a diabetic eye exam because it is difficult to distinguish between individuals who are legally blind but require a retinal exam and those who are completely blind and therefore do not require an exam.*

### Monitoring for Diabetic Nephropathy



**Data Elements for Reporting**

Organizations that submit HEDIS data to NCQA must provide the following data elements.

**Table CDC-1/2/3: Data Elements for Comprehensive Diabetes Care**

	Administrative	Hybrid
Measurement year	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Data collection methodology (Administrative or Hybrid)	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Eligible population	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Number of numerator events by administrative data in eligible population (before exclusions)		<i>Each of the 10 rates</i>
Current year's administrative rate (before exclusions)		<i>Each of the 10 rates</i>
Minimum required sample size (MRSS) or other sample size		<i>Each of the 10 rates</i>
Oversampling rate		<i>Each of the 10 rates</i>
Final sample size (FSS)		<i>Each of the 10 rates</i>
Number of numerator events by administrative data in FSS		<i>Each of the 10 rates</i>
Administrative rate on FSS		<i>Each of the 10 rates</i>
Number of original sample records excluded because of valid data errors		<i>Each of the 10 rates</i>
Number of administrative data records excluded		<i>Each of the 10 rates</i>
Number of medical records excluded		<i>Each of the 10 rates</i>
Number of employee/dependent medical records excluded		<i>Each of the 10 rates</i>
Records added from the oversample list		<i>Each of the 10 rates</i>
Denominator		<i>Each of the 10 rates</i>
Numerator events by administrative data	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Numerator events by medical records		<i>Each of the 10 rates</i>
Reported rate	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Lower 95% confidence interval	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>
Upper 95% confidence interval	<i>Each of the 10 rates</i>	<i>Each of the 10 rates</i>