

# Prevention Quality Indicator 03 (PQI 03) Diabetes Long-Term Complications Admission Rate July 2019 Area-Level Indicator Type of Score: Rate

#### Prepared by:

Agency for Healthcare Research and Quality U.S. Department of Health and Human Services <u>www.qualityindicators.ahrq.gov</u>

#### DESCRIPTION

Admissions for a principal diagnosis of diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) per 100,000 population, ages 18 years and older. Excludes obstetric admissions and transfers from other institutions.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report admissions per 100,000 population.]

## NUMERATOR

Discharges, for patients ages 18 years and older, with a principal ICD-10-CM diagnosis code for diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) (*ACDIALD*\*).

[NOTE: Obstetric discharges are not included in the PQI rate for PQI 03, though the AHRQ  $QI^{TM}$  software does not explicitly exclude obstetric cases. By definition, discharges with a principal diagnosis of diabetes with long-term complications exclude obstetric discharges, because the principle diagnosis for an obstetric discharge would identify it as obstetric, and no such diagnoses are included in the set of qualifying diagnoses.]

## NUMERATOR EXCLUSIONS

Exclude cases:

• with admission source for transferred from a different hospital or other health care facility *(Appendix A)* (UB04 Admission source - 2, 3)

• with a point of origin code for transfer from a hospital, skilled nursing facility (SNF) or intermediate care facility (ICF), or other healthcare facility (*Appendix A*) (UB04 Point of Origin - 4, 5, 6)

• with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

#### <u> Appendix A - Admission Codes for Transfers</u>

#### DENOMINATOR

Population ages 18 years and older in metropolitan area\*\*\* or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county where the hospital discharge occurred.\*\*

\*\*\* The term "metropolitan area" (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, "area" could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area, or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.

\*\* The previous version of this indicator allowed the denominator to be specified with the diabetic population only and calculated with the SAS QI software through the condition-specific denominator at the state-level feature. However, the disease-specific denominator file has been temporarily removed from the software for further review and refinement.

\* See below for code list

#### Diabetes with long-term complications diagnosis codes: (ACDIALD)

E1021	Type 1 diabetes mellitus with diabetic nephropathy	E1121	Type 2 diabetes mellitus with nephropathy
E1022	Type 1 diabetes mellitus with diabetic	E1122	Type 2 diabetes mellitus with
E1029	chronic kidney disease Type 1 diabetes mellitus with other	E1129	chronic kidney disease Type 2 diabetes mellitus with
2102)	diabetic kidney complication	L112)	diabetic kidney complication
E10311	Type 1 diabetes mellitus with	E11311	Type 2 diabetes mellitus with
	unspecified diabetic retinopathy with macular edema		unspecified diabetic retinopat macular edema
E10319	Type 1 diabetes mellitus with	E11319	Type 2 diabetes mellitus with
110019	unspecified diabetic retinopathy without macular edema		unspecified diabetic retinopat macular edema
E10321	Type 1 diabetes mellitus with mild	E11321	Type 2 diabetes mellitus with
L10521	nonproliferative diabetic retinopathy with macular edema	L11521	nonproliferative diabetic retir with macular edema
E103211	Type 1 diabetes mellitus with mild	E113211	Type 2 diabetes mellitus with
L105211	nonproliferative diabetic retinopathy	L115211	nonproliferative diabetic retir
	with macular edema, right eye		with macular edema, right ey
E103212	Type 1 diabetes mellitus with mild	E113212	Type 2 diabetes mellitus with
2103212	nonproliferative diabetic retinopathy	2113212	nonproliferative diabetic retir
	with macular edema, left eye		with macular edema, left eye
E103213	Type 1 diabetes mellitus with mild	E113213	Type 2 diabetes mellitus with
2105215	nonproliferative diabetic retinopathy	1110210	nonproliferative diabetic retir
	with macular edema, bilateral		with macular edema, bilateral
E103219	Type 1 diabetes mellitus with mild	E113219	Type 2 diabetes mellitus with
2100212	nonproliferative diabetic retinopathy	2110217	nonproliferative diabetic retir
	with macular edema, unspecified eye		with macular edema, unspeci
E10329	Type 1 diabetes mellitus with mild	E11329	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	without macular edema		without macular edema
E103291	Type 1 diabetes mellitus with mild	E113291	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	without macular edema, right eye		without macular edema, right
E103292	Type 1 diabetes mellitus with mild	E113292	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	without macular edema, left eye		without macular edema, left e
E103293	Type 1 diabetes mellitus with mild	E113293	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	without macular edema, bilateral		without macular edema, bilat
E103299	Type 1 diabetes mellitus with mild	E113299	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	without macular edema, unspecified eye		without macular edema, unsp
E10331	Type 1 diabetes mellitus with moderate	E11331	Type 2 diabetes mellitus with
	nonproliferative diabetic retinopathy		nonproliferative diabetic retir
	with macular edema		with macular edema

diabetes mellitus with ified diabetic retinopathy with ar edema diabetes mellitus with ified diabetic retinopathy without ar edema diabetes mellitus with mild oliferative diabetic retinopathy acular edema diabetes mellitus with mild oliferative diabetic retinopathy acular edema, right eye diabetes mellitus with mild oliferative diabetic retinopathy acular edema, left eye diabetes mellitus with mild oliferative diabetic retinopathy acular edema, bilateral diabetes mellitus with mild oliferative diabetic retinopathy acular edema, unspecified eye diabetes mellitus with mild oliferative diabetic retinopathy it macular edema diabetes mellitus with mild oliferative diabetic retinopathy it macular edema, right eye diabetes mellitus with mild oliferative diabetic retinopathy it macular edema, left eye diabetes mellitus with mild oliferative diabetic retinopathy t macular edema, bilateral diabetes mellitus with mild oliferative diabetic retinopathy t macular edema, unspecified eye

diabetes mellitus with diabetic

diabetes mellitus with diabetic

diabetes mellitus with other

diabetes mellitus with moderate oliferative diabetic retinopathy acular edema

E103311	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy
E102212	with macular edema, right eye
E103312	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
E100010	with macular edema, left eye
E103313	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	with macular edema, bilateral
E103319	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	with macular edema, unspecified eye
E10339	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	without macular edema
E103391	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	without macular edema, right eye
E103392	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	without macular edema, left eye
E103393	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	without macular edema, bilateral
E103399	Type 1 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	without macular edema, unspecified eye
E10341	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	with macular edema
E103411	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	with macular edema, right eye
E103412	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	with macular edema, left eye
E103413	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	with macular edema, bilateral
E103419	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	with macular edema, unspecified eye
E10349	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema

E113311	Type 2 diabetes mellitus with moderate
	nonproliferative diabetic retinopathy
	with macular edema, right eye

- E113312 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, left eye
- E113313 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, bilateral
- E113319 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, unspecified eye
- E11339 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
- E113391 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, right eye
- E113392 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, left eye
- E113393 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, bilateral
- E113399 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema, unspecified eye
- E11341 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
- E113411 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, right eye
- E113412 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, left eye
- E113413 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, bilateral
- E113419 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye

E11349 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema

E103491	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema, right eye
E103492	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema, left eye
E103493	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema, bilateral
E103499	Type 1 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema, unspecified eye
E10351	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	macular edema
E103511	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	macular edema, right eye
E103512	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	macular edema, left eye
E103513	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	macular edema, bilateral
E103519	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	macular edema, unspecified eye
E103521	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment involving the
	macula, right eye
E103522	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment involving the
	macula, left eye
E103523	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment involving the
	macula, bilateral
E103529	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment involving the
	macula, unspecified eye
E103531	Type 1 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment not involving
	the macula, right eye

E113491	Type 2 diabetes mellitus with severe
	nonproliferative diabetic retinopathy
	without macular edema, right eye
E113492	Type 2 diabetes mellitus with severe

- nonproliferative diabetic retinopathy without macular edema, left eye
- E113493 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, bilateral
- E113499 Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye
- E11351 Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema
- E113511 Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye
- E113512 Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye
- E113513 Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral
- E113519 Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye
- E113521 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, right eye
- E113522 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, left eye
- E113523 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, bilateral
- E113529 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye
- E113531 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right eye

E103532	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	traction retinal detachment not involving	
	the macula, left eye	
E103533	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	traction retinal detachment not involving	
	the macula, bilateral	
E103539	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	traction retinal detachment not involving	
	the macula, unspecified eye	
E103541	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	combined traction retinal detachment	
	and rhegmatogenous retinal detachment,	
	right eye	
E103542	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	combined traction retinal detachment	
	and rhegmatogenous retinal detachment,	
	left eye	
E103543	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	combined traction retinal detachment	
	and rhegmatogenous retinal detachment,	
	bilateral	
E103549	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy with	
	combined traction retinal detachment	
	and rhegmatogenous retinal detachment,	
	unspecified eye	
E103551	Type 1 diabetes mellitus with stable	E11
	proliferative diabetic retinopathy, right	
	eye	
E103552	Type 1 diabetes mellitus with stable	E11
	proliferative diabetic retinopathy, left	
	eye	
E103553	Type 1 diabetes mellitus with stable	E11
	proliferative diabetic retinopathy,	
	bilateral	
E103559	Type 1 diabetes mellitus with stable	E11
	proliferative diabetic retinopathy,	
	unspecified eye	
E10359	Type 1 diabetes mellitus with	E11
	proliferative diabetic retinopathy	
	without macular edema	

E113532	Type 2 diabetes mellitus with
	proliferative diabetic retinopathy with
	traction retinal detachment not involving
	the macula, left eye

- E113533 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
- E113539 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye
- E113541 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye
- E113542 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
- E113543 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral
- E113549 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye
- E113551 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
- E113552 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
- E113553 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
- E113559 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
- E11359 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema

E103591	Type 1 diabetes mellitus with proliferative diabetic retinopathy	E113591	Type 2 diabetes mellitus with proliferative diabetic retinopathy
E103592	without macular edema, right eye Type 1 diabetes mellitus with proliferative diabetic retinopathy	E113592	without macular edema, right eye Type 2 diabetes mellitus with proliferative diabetic retinopathy
E103593	without macular edema, left eye Type 1 diabetes mellitus with proliferative diabetic retinopathy	E113593	without macular edema, left eye Type 2 diabetes mellitus with proliferative diabetic retinopathy
E103599	without macular edema, bilateral Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye	E113599	without macular edema, bilateral Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E1036	Type 1 diabetes mellitus with diabetic cataract	E1136	Type 2 diabetes mellitus with diabetic cataract
E1037X1	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye	E1137X1	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E1037X2	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye	E1137X2	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E1037X3	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral	E1137X3	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E1037X9	Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye	E1137X9	Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E1039	Type 1 diabetes mellitus with other diabetic ophthalmic complication	E1139	Type 2 diabetes mellitus with other diabetic ophthalmic complication
E1040	Type 1 diabetes mellitus with diabetic neuropathy, unspecified	E1140	Type 2 diabetes mellitus with diabetic neuropathy, unspecified
E1041	Type 1 diabetes mellitus with diabetic mononeuropathy	E1141	Type 2 diabetes mellitus with diabetic mononeuropathy
E1042	Type 1 diabetes mellitus with diabetic polyneuropathy	E1142	Type 2 diabetes mellitus with diabetic polyneuropathy
E1043	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy	E1143	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy
E1044	Type 1 diabetes mellitus with diabetic amyotrophy	E1144	Type 2 diabetes mellitus with diabetic amyotrophy
E1049	Type 1 diabetes mellitus with other diabetic neurological complication	E1149	Type 2 diabetes mellitus with other diabetic neurological complication
E1051	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene	E1151	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E1052	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene	E1152	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E1059	Type 1 diabetes mellitus with other circulatory complications	E1159	Type 2 diabetes mellitus with other circulatory complications

E10610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy	E11610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E10618	Type 1 diabetes mellitus with other diabetic arthropathy	E11618	Type 2 diabetes mellitus with other diabetic arthropathy
E10620	Type 1 diabetes mellitus with diabetic dermatitis	E11620	Type 2 diabetes mellitus with diabetic dermatitis
E10621	Type 1 diabetes mellitus with foot ulcer	E11621	Type 2 diabetes mellitus with foot ulcer
E10622	Type 1 diabetes mellitus with other skin ulcer	E11622	Type 2 diabetes mellitus with other skin ulcer
E10628	Type 1 diabetes mellitus with other skin complications	E11628	Type 2 diabetes mellitus with other skin complications
E10630	Type 1 diabetes mellitus with periodontal disease	E11630	Type 2 diabetes mellitus with periodontal disease
E10638	Type 1 diabetes mellitus with other oral complications	E11638	Type 2 diabetes mellitus with other oral complications
E1069	Type 1 diabetes mellitus with other specified complication	E1169	Type 2 diabetes mellitus with other specified complication
E108	Type 1 diabetes mellitus with unspecified complications	E118	Type 2 diabetes mellitus with unspecified complications