



**AHRQ Quality Indicators™ (AHRQ QI™)  
ICD-9-CM and ICD-10-CM/PCS  
Specification Enhanced Version 5.0**

**Prevention Quality Indicators #3 (PQI #3)  
Diabetes Long-Term Complications  
Admission Rate**

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Area-Level Indicator  
Type of Score: Rate**

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## PQI #3 Diabetes Long-Term Complications Admission Rate

DESCRIPTION
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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.]*

### PQI #3 Diabetes Long-Term Complications Admission Rate

#### NUMERATOR

Discharges, for patients ages 18 years and older, with a principal ICD-9-CM or ICD-10-CM diagnosis code for diabetes with long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified).

*[NOTE: By definition, discharges with a principal diagnosis of diabetes with long-term complications are precluded from an assignment of MDC 14 by grouper software. Thus, obstetric discharges should not be considered in the PQI rate, though the AHRQ QI™ software does not explicitly exclude obstetric cases.]*

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

ICD-9-CM	Description	ICD-10-CM	Description
25040	DM RENAL COMP T2 CONT	E1021	Type 1 diabetes mellitus with diabetic nephropathy
25041	DM RENAL COMP T1 CONT	E1022	Type 1 diabetes mellitus with diabetic chronic kidney disease
25042	DM RENAL COMP T2 UNCNT	E1029	Type 1 diabetes mellitus with other diabetic kidney
25043	DM RENAL COMP T1 UNCNT	E10311	Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema
25050	DM EYE COMP T2 CONT	E10319	Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema
25051	DM EYE COMP T1 CONT	E10321	Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
25052	DM EYE COMP T2 UNCNT	E10329	Type 1 diabetes mellitus with mild nonproliferative
25053	DM EYE COMP T1 UNCNT	E10331	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
25060	DM NEURO COMP T2 CONT	E10339	Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
25061	DM NEURO COMP T1 CONT	E10341	Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema

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25062	DM NEURO COMP T2 UNCNT	E10349	Type 1 diabetes mellitus with severe nonproliferative
25063	DM NEURO COMP T1 UNCNT	E10351	Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema
25070	DM CIRCU DIS T2 CONT	E10359	Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema
25071	DM CIRCU DIS T1 CONT	E1036	Type 1 diabetes mellitus with diabetic cataract
25072	DM CIRCU DIS T2 UNCNT	E1039	Type 1 diabetes mellitus with other diabetic ophthalmic complication
25073	DM CIRCU DIS T1 UNCNT	E1040	Type 1 diabetes mellitus with diabetic neuropathy, unspecified
25080	DM W COMP NEC T2 CONT	E1041	Type 1 diabetes mellitus with diabetic mononeuropathy
25081	DM W COMP NEC T1 CONT	E1042	Type 1 diabetes mellitus with diabetic polyneuropathy
25082	DM W COMP NEC T2 UNCNT	E1043	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy
25083	DM W COMP NEC T1 UNCNT	E1044	Type 1 diabetes mellitus with diabetic amyotrophy
25090	DM W COMPL NOS T2 CONT	E1049	Type 1 diabetes mellitus with other diabetic neurological complication
25091	DM W COMPL NOS T1 CONT	E1051	Type 1 diabetes mellitus with diabetic peripheral angiopathy without gangrene
25092	DM W COMPL NOS T2 UNCNT	E1052	Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene
25093	DM W COMPL NOS T1 UNCNT	E1059	Type 1 diabetes mellitus with other circulatory complications
		E10610	Type 1 diabetes mellitus with diabetic neuropathic arthropathy
		E10618	Type 1 diabetes mellitus with other diabetic arthropathy
		E10620	Type 1 diabetes mellitus with diabetic dermatitis
		E10621	Type 1 diabetes mellitus with foot ulcer
		E10622	Type 1 diabetes mellitus with other skin ulcer
		E10628	Type 1 diabetes mellitus with other skin complications
		E10630	Type 1 diabetes mellitus with periodontal disease
		E10638	Type 1 diabetes mellitus with other oral complications

E1069	Type 1 diabetes mellitus with other specified complication
E108	Type 1 diabetes mellitus with unspecified complications
E1121	Type 2 diabetes mellitus with diabetic nephropathy
E1122	Type 2 diabetes mellitus with diabetic chronic kidney disease
E1129	Type 2 diabetes mellitus with other diabetic kidney complication
E11311	Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema
E11319	Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema
E11321	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema
E11329	Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema
E11331	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E11339	Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy without macular edema
E11341	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema
E11349	Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
E11351	Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema
E11359	Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E1136	Type 2 diabetes mellitus with diabetic cataract
E1139	Type 2 diabetes mellitus with other diabetic ophthalmic complication

E1140	Type 2 diabetes mellitus with diabetic neuropathy, unspecified
E1141	Type 2 diabetes mellitus with diabetic mononeuropathy
E1142	Type 2 diabetes mellitus with diabetic polyneuropathy
E1143	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy
E1144	Type 2 diabetes mellitus with diabetic amyotrophy
E1149	Type 2 diabetes mellitus with other diabetic neurological complication
E1151	Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene
E1152	Type 2 diabetes mellitus with diabetic peripheral angiopathy with gangrene
E1159	Type 2 diabetes mellitus with other circulatory complications
E11610	Type 2 diabetes mellitus with diabetic neuropathic arthropathy
E11618	Type 2 diabetes mellitus with other diabetic arthropathy
E11620	Type 2 diabetes mellitus with diabetic dermatitis
E11621	Type 2 diabetes mellitus with foot ulcer
E11622	Type 2 diabetes mellitus with other skin ulcer
E11628	Type 2 diabetes mellitus with other skin complications
E11630	Type 2 diabetes mellitus with periodontal disease
E11638	Type 2 diabetes mellitus with other oral complications
E1169	Type 2 diabetes mellitus with other specified complication
E118	Type 2 diabetes mellitus with unspecified complications

## PQI #3 Diabetes Long-Term Complications Admission Rate

### NUMERATOR EXCLUSIONS

Exclude cases:

- transfer from a hospital (different facility)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF)
- transfer from another health care facility
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)

[Appendix A – Admission Codes for Transfers](#)

## PQI #3 Diabetes Long-Term Complications Admission Rate

### DENOMINATOR

Population ages 18 years and older in metropolitan area<sup>†</sup> 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.<sup>‡</sup>

<sup>†</sup> 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.

<sup>‡</sup> The denominator can be specified with the diabetic population only and calculated with the SAS QI software through the condition-specific denominator at the state-level feature.



### **PQI #3 Diabetes Long-Term Complications Admission Rate**

<b>DENOMINATOR EXCLUSIONS</b>
<i>Not Applicable</i>