Prevention Quality Indicator 03 (PQI 03) Diabetes Long-Term Complications Admission Rate
June 2018
Area-Level Indicator
Type of Score: Rate

Prepared by:
Agency for Healthcare Research and Quality
U.S. Department of Health and Human Services
www.qualityindicators.ahrq.gov

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: 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.]
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)

Appendix A - Admission Codes for Transfers

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 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.

* See below for code list
Diabetes with long-term complications diagnosis codes: (ACDIALD)

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>E1021</td>
<td>Type 1 diabetes mellitus with diabetic nephropathy</td>
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<tr>
<td>E1022</td>
<td>Type 1 diabetes mellitus with diabetic chronic kidney disease</td>
</tr>
<tr>
<td>E1029</td>
<td>Type 1 diabetes mellitus with other diabetic kidney complication</td>
</tr>
<tr>
<td>E10311</td>
<td>Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema</td>
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<td>E10319</td>
<td>Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema</td>
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<td>Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema</td>
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<td>Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye</td>
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<td>Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye</td>
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<td>Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral</td>
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<tr>
<td>E1129</td>
<td>Type 2 diabetes mellitus with other diabetic kidney complication</td>
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<td>Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema</td>
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<td>Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema</td>
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<td>Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye</td>
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E10331  Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema
E103311 Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema, right eye
E103312 Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy 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
E11331 Type 2 diabetes mellitus with moderate nonproliferative diabetic retinopathy with 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
E10349  Type 1 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

E11349  Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema
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
E103531 Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, right 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 proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye
E113532 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, left eye

E103533 Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral
E113533 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, bilateral

E103539 Type 1 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye
E113539 Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment not involving the macula, unspecified eye

E103541 Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye
E113541 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, right eye

E103542 Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye
E113542 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, left eye

E103543 Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral
E113543 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, bilateral

E103549 Type 1 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye
E113549 Type 2 diabetes mellitus with proliferative diabetic retinopathy with combined traction retinal detachment and rhegmatogenous retinal detachment, unspecified eye

E103551 Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, right eye
E113551 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, right eye

E103552 Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, left eye
E113552 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, left eye

E103553 Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E113553 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, bilateral
E103559 Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
E10359 Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E103591 Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E103592 Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E103593 Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E103599 Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E1036 Type 1 diabetes mellitus with diabetic cataract
E1037X1 Type 1 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
E1037X3 Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E1037X9 Type 1 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E1039 Type 1 diabetes mellitus with other diabetic ophthalmic complication
E1040 Type 1 diabetes mellitus with diabetic neuropathy, unspecified
E1041 Type 1 diabetes mellitus with diabetic mononeuropathy
E1042 Type 1 diabetes mellitus with diabetic polyneuropathy
E1043 Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy
E1044 Type 1 diabetes mellitus with diabetic amyotrophy
E1049 Type 1 diabetes mellitus with other diabetic neurological complication

E113559 Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye
E11359 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema
E113591 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye
E113592 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye
E113593 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral
E113599 Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye
E1136 Type 2 diabetes mellitus with diabetic cataract
E1137X1 Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, right eye
E1137X2 Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, left eye
E1137X3 Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, bilateral
E1137X9 Type 2 diabetes mellitus with diabetic macular edema, resolved following treatment, unspecified eye
E1139 Type 2 diabetes mellitus with other diabetic ophthalmic complication
E1140 Type 2 diabetes mellitus with diabetic neuropathy, unspecified
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<td>Type 1 diabetes mellitus with diabetic peripheral angiopathy with gangrene</td>
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<td>E1059</td>
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<td>Type 1 diabetes mellitus with diabetic dermatitis</td>
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<td>Type 1 diabetes mellitus with foot ulcer</td>
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