



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

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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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| E1021 | Type 1 diabetes mellitus with diabetic nephropathy | E1121 | Type 2 diabetes mellitus with diabetic nephropathy |
| E1022 | Type 1 diabetes mellitus with diabetic chronic kidney disease | E1122 | Type 2 diabetes mellitus with diabetic chronic kidney disease |
| E1029 | Type 1 diabetes mellitus with other diabetic kidney complication | E1129 | Type 2 diabetes mellitus with other diabetic kidney complication |
| E10311 | Type 1 diabetes mellitus with unspecified diabetic retinopathy with macular edema | E11311 | Type 2 diabetes mellitus with unspecified diabetic retinopathy with macular edema |
| E10319 | Type 1 diabetes mellitus with unspecified diabetic retinopathy without macular edema | E11319 | Type 2 diabetes mellitus with unspecified diabetic retinopathy without macular edema |
| E10321 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema | E11321 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema |
| E103211 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye | E113211 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, right eye |
| E103212 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye | E113212 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, left eye |
| E103213 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral | E113213 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, bilateral |
| E103219 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye | E113219 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy with macular edema, unspecified eye |
| E10329 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema | E11329 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema |
| E103291 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye | E113291 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, right eye |
| E103292 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye | E113292 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, left eye |
| E103293 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral | E113293 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, bilateral |
| E103299 | Type 1 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye | E113299 | Type 2 diabetes mellitus with mild nonproliferative diabetic retinopathy without macular edema, unspecified eye |

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| E10331 | Type 1 diabetes mellitus with moderate nonproliferative diabetic retinopathy with macular edema | E11331 | Type 2 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 | E113311 | Type 2 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 | E113312 | Type 2 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 | E113313 | Type 2 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 | E113319 | Type 2 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 | E11339 | Type 2 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 | E113391 | Type 2 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 | E113392 | Type 2 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 | E113393 | Type 2 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 | E113399 | Type 2 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 | E11341 | Type 2 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 | E113411 | Type 2 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 | E113412 | Type 2 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 | E113413 | Type 2 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 | E113419 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy with macular edema, unspecified eye |

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| E10349 | Type 1 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema | 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 | E113491 | Type 2 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 | E113492 | Type 2 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 | E113493 | Type 2 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 | E113499 | Type 2 diabetes mellitus with severe nonproliferative diabetic retinopathy without macular edema, unspecified eye |
| E10351 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema | E11351 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema |
| E103511 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, right eye | E113511 | Type 2 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 | E113512 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, left eye |
| E103513 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral | E113513 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with macular edema, bilateral |
| E103519 | Type 1 diabetes mellitus with proliferative diabetic retinopathy with macular edema, unspecified eye | E113519 | Type 2 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 | E113521 | Type 2 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 | E113522 | Type 2 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 | E113523 | Type 2 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 | E113529 | Type 2 diabetes mellitus with proliferative diabetic retinopathy with traction retinal detachment involving the macula, unspecified eye |

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| 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 |

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| E103559 | Type 1 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye | E113559 | Type 2 diabetes mellitus with stable proliferative diabetic retinopathy, unspecified eye |
| E10359 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema | E11359 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema |
| E103591 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, right eye | E113591 | Type 2 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 | E113592 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, left eye |
| E103593 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral | E113593 | Type 2 diabetes mellitus with proliferative diabetic retinopathy without macular edema, bilateral |
| E103599 | Type 1 diabetes mellitus with proliferative diabetic retinopathy without macular edema, unspecified eye | E113599 | 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 |

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| 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 |