



Prevention Quality Indicator 07 (PQI 07) Hypertension Admission Rate

July 2017

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 with a principal diagnosis of hypertension per 100,000 population, ages 18 years and older. Excludes kidney disease combined with dialysis access procedure admissions, cardiac procedure admissions, 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 hypertension (*ACSHYPD* *).

[NOTE: By definition, discharges with a principal diagnosis of hypertension 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 any-listed ICD-10-PCS procedure codes for cardiac procedure (*Appendix B*)
- with any-listed ICD-10-CM diagnosis codes of Stage I-IV kidney disease (*ACSHY2D*^{*}), only if accompanied by any-listed ICD-10-PCS procedure codes for dialysis access (*DIALY2P*^{*})
- transfer from a hospital (different facility) (*Appendix A*)
- transfer from a Skilled Nursing Facility (SNF) or Intermediate Care Facility (ICF) (*Appendix A*)
- transfer from another health care facility (*Appendix A*)
- 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](#)

[Appendix B - Cardiac Procedure Codes](#)

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 of the hospital where the 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.

* See below for code list

Hypertension diagnosis codes: (ACSHYPD)

I10	Essential (primary) hypertension	I1310	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I119	Hypertensive heart disease without heart failure	I160	Hypertensive urgency
I129	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease	I161	Hypertensive emergency
		I169	Hypertensive crisis, unspecified

Stage I-IV kidney disease diagnosis codes: (ACSHY2D)

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|------|--|-------|---|
| I129 | Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease | I1310 | Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease |
|------|--|-------|---|

Dialysis access procedure codes: (DIALY2P)

031509D	Bypass Right Axillary Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	03180JF	Bypass Left Brachial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach
031509F	Bypass Right Axillary Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	03180KD	Bypass Left Brachial Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach
03150AD	Bypass Right Axillary Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	03180KF	Bypass Left Brachial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach
03150AF	Bypass Right Axillary Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	03180ZD	Bypass Left Brachial Artery to Upper Arm Vein, Open Approach
03150JD	Bypass Right Axillary Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	03180ZF	Bypass Left Brachial Artery to Lower Arm Vein, Open Approach
03150JF	Bypass Right Axillary Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	031909F	Bypass Right Ulnar Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach
03150KD	Bypass Right Axillary Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	03190AF	Bypass Right Ulnar Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach
03150KF	Bypass Right Axillary Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	03190JF	Bypass Right Ulnar Artery to Lower Arm Vein with Synthetic Substitute, Open Approach
03150ZD	Bypass Right Axillary Artery to Upper Arm Vein, Open Approach	03190KF	Bypass Right Ulnar Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach
03150ZF	Bypass Right Axillary Artery to Lower Arm Vein, Open Approach	03190ZF	Bypass Right Ulnar Artery to Lower Arm Vein, Open Approach
031609D	Bypass Left Axillary Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	031A09F	Bypass Left Ulnar Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach
031609F	Bypass Left Axillary Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	031A0AF	Bypass Left Ulnar Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach
03160AD	Bypass Left Axillary Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	031A0JF	Bypass Left Ulnar Artery to Lower Arm Vein with Synthetic Substitute, Open Approach
03160AF	Bypass Left Axillary Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	031A0KF	Bypass Left Ulnar Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach
03160JD	Bypass Left Axillary Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	031A0ZF	Bypass Left Ulnar Artery to Lower Arm Vein, Open Approach
03160JF	Bypass Left Axillary Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	031B09F	Bypass Right Radial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach
03160KD	Bypass Left Axillary Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	031B0AF	Bypass Right Radial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach

03160KF	Bypass Left Axillary Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	031B0JF	Bypass Right Radial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach
03160ZD	Bypass Left Axillary Artery to Upper Arm Vein, Open Approach	031B0KF	Bypass Right Radial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach
03160ZF	Bypass Left Axillary Artery to Lower Arm Vein, Open Approach	031B0ZF	Bypass Right Radial Artery to Lower Arm Vein, Open Approach
031709D	Bypass Right Brachial Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	031C09F	Bypass Left Radial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach
031709F	Bypass Right Brachial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	031C0AF	Bypass Left Radial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach
03170AD	Bypass Right Brachial Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	031C0JF	Bypass Left Radial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach
03170AF	Bypass Right Brachial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	031C0KF	Bypass Left Radial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach
03170JD	Bypass Right Brachial Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	031C0ZF	Bypass Left Radial Artery to Lower Arm Vein, Open Approach
03170JF	Bypass Right Brachial Artery to Lower Arm Vein with Synthetic Substitute, Open Approach	041K09S	Bypass Right Femoral Artery to Lower Extremity Vein with Autologous Venous Tissue, Open Approach
03170KD	Bypass Right Brachial Artery to Upper Arm Vein with Nonautologous Tissue Substitute, Open Approach	041K0AS	Bypass Right Femoral Artery to Lower Extremity Vein with Autologous Arterial Tissue, Open Approach
03170KF	Bypass Right Brachial Artery to Lower Arm Vein with Nonautologous Tissue Substitute, Open Approach	041K0JS	Bypass Right Femoral Artery to Lower Extremity Vein with Synthetic Substitute, Open Approach
03170ZD	Bypass Right Brachial Artery to Upper Arm Vein, Open Approach	041K0KS	Bypass Right Femoral Artery to Lower Extremity Vein with Nonautologous Tissue Substitute, Open Approach
03170ZF	Bypass Right Brachial Artery to Lower Arm Vein, Open Approach	041K0ZS	Bypass Right Femoral Artery to Lower Extremity Vein, Open Approach
031809D	Bypass Left Brachial Artery to Upper Arm Vein with Autologous Venous Tissue, Open Approach	041L09S	Bypass Left Femoral Artery to Lower Extremity Vein with Autologous Venous Tissue, Open Approach
031809F	Bypass Left Brachial Artery to Lower Arm Vein with Autologous Venous Tissue, Open Approach	041L0AS	Bypass Left Femoral Artery to Lower Extremity Vein with Autologous Arterial Tissue, Open Approach
03180AD	Bypass Left Brachial Artery to Upper Arm Vein with Autologous Arterial Tissue, Open Approach	041L0JS	Bypass Left Femoral Artery to Lower Extremity Vein with Synthetic Substitute, Open Approach
03180AF	Bypass Left Brachial Artery to Lower Arm Vein with Autologous Arterial Tissue, Open Approach	041L0KS	Bypass Left Femoral Artery to Lower Extremity Vein with Nonautologous Tissue Substitute, Open Approach
03180JD	Bypass Left Brachial Artery to Upper Arm Vein with Synthetic Substitute, Open Approach	041L0ZS	Bypass Left Femoral Artery to Lower Extremity Vein, Open Approach