

Table PQI08-AD. Number of Inpatient Hospital Admissions for Heart Failure per 100,000 Beneficiary Months for Adults Age 18 and Older, as Submitted by States for the FFY 2018 Adult Core Set Report (n = 25 states) [Lower rates are better]

State	Population	Methodology	Denominator	Rate
State Mean				28.8
State Median				24.8
States Reporting Ages 18 to 64 (n=23)				
Alabama	Medicaid	Administrative	2,357,803	66.1
Arizona	Medicaid; Dual Eligibles	Administrative	9,207,165	15.9
Arkansas	Medicaid; CHIP; Dual Eligibles	Administrative	1,280,767	46.5
Connecticut	Medicaid	Administrative	5,119,076	12.2
Delaware	Medicaid; Dual Eligibles	Administrative	598,629	30.7
Illinois	Medicaid; CHIP	Administrative	16,969,820	21.5
Iowa	Medicaid	Administrative	2,835,438	30.0
Louisiana	Medicaid	Administrative	7,936,655	34.8
Massachusetts	Medicaid	Administrative	8,097,398	15.1
Michigan	Medicaid	Administrative	12,611,412	30.6
Minnesota	Medicaid; CHIP; Dual Eligibles	Administrative	5,412,633	23.9
Missouri	Medicaid; CHIP	Administrative	3,817,168	51.1
New Hampshire	Medicaid	Administrative	503,476	27.2
New York	Medicaid	Administrative	37,036,310	18.5
North Carolina	Medicaid	Administrative	10,293,956	41.9
Oklahoma	Medicaid; Dual Eligibles	Administrative	2,211,795	24.8
Oregon	Medicaid; Dual Eligibles	Administrative	5,562,559	19.1
Pennsylvania	Medicaid	Administrative	14,206,261	19.4
South Carolina	Medicaid; CHIP	Administrative	2,815,721	34.6
Vermont	Medicaid; CHIP	Administrative	937,412	4.7
Washington	Medicaid; Dual Eligibles	Administrative	9,954,235	19.6
West Virginia	Medicaid; Dual Eligibles	Administrative	3,806,887	33.0
Wyoming	Medicaid; Dual Eligibles	Administrative	248,205	9.3
States Reporting Age 18 and Older (n=2)				
Tennessee	Medicaid	Administrative	6,662,688	23.8
Texas	Medicaid	Administrative	10,230,560	66.0

Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle. More information on the Adult Core Set is available at <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/adult-core-set/index.html>.

Notes: This measure identifies the number of inpatient hospital admissions for heart failure per 100,000 beneficiary months for adults age 18 and older.

The term "states" includes the 50 states and the District of Columbia.

Means are calculated as the unweighted average of all state rates.

Unless otherwise specified, states used Adult Core Set specifications, based on Agency for Healthcare Research and Quality 2018 specifications.

Unless otherwise specified, the measurement period for this measure was January 1, 2017 to December 31, 2017. AZ reported data for FFY 2016.

Unless otherwise specified, rates displayed in this table reflect state reporting for Medicaid beneficiaries ages 18 to 64 or age 18 and older.

The Adult Core Set specifications include guidance for calculating this measure using the administrative method. Unless otherwise specified, the administrative data source is the state's MMIS and/or data submitted by managed care plans, including behavioral health plans.

Denominators are assumed to be the measure-eligible population for states using the administrative method. Some states reported exclusions from the denominator, as noted in the state-specific comments below.

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AHRQ = Agency for Healthcare Research and Quality; CCO = Coordinated Care Organization; CHIP = Children's Health Insurance Program; CMS = Centers for Medicare & Medicaid Services; CMO = Care Management Organization; CY = Calendar Year; ED = Emergency Department; EHR = Electronic Health Record; EQRO = External Quality Review Organization; FFS = Fee for Service; FFY = Federal Fiscal Year; HEDIS = Healthcare Effectiveness Data and Information Set; HMO = Health Maintenance Organization; ICD = International Classification of Diseases; LOINC = Logical Observation Identifiers Names and Codes; MACPro = Medicaid and CHIP Program System; MCO = Managed Care Organization; MMIS = Medicaid Management Information System; NCQA = National Committee for Quality Assurance; NR = Not Reported; PCCM = Primary Care Case Management; PCP = Primary Care Practitioner.

State-Specific Comments:

AL:	Rate includes FFS and PCCM populations. Rate excludes Medicare-Medicaid Dual Eligibles.
AZ:	Rate includes managed care population (6 MCOs), representing 78 percent of the population. Rate excludes FFS population, seriously mentally ill population, and state long-term care elderly, physically, or developmentally disabled population, representing 22 percent of the population. State conducted an internal validation of the data.
AR:	Rate includes FFS and PCCM populations. State used proprietary index hospitalization coding to determine hospital admissions, used HEDIS 2018 value sets (Maternity, Maternity Diagnosis, Pregnancy, and Pregnancy Diagnosis) to identify obstetric exclusions, and did not implement the hospital transfer, gender, quarter, year, or county exclusions. Rate was audited by the state's data contractor.
CT:	Rate includes FFS population. Rate excludes Medicare-Medicaid Dual Eligibles.
DE:	Rate includes managed care population (1 MCO), representing 72 percent of the population. Rate excludes FFS population and enrollees in one MCO, representing 28 percent of the population.
IL:	Rate includes FFS, PCCM, and managed care populations (13 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles. Rate was validated by the state's EQRO.
IA:	Rate includes FFS and managed care populations (3 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles. State replaced codes for the numerator with the following Value Sets: Heart Failure and Acute Inpatient. State used the Cardiac Procedures Value Set instead of diagnosis codes listed for cardiac procedures. State used the Pregnancy and Pregnancy Diagnosis Value Sets instead of Major Diagnostic Category (MDC) Code Admit = 14 (Pregnancy, Childbirth, and Puerperium). State used codes for transfers from an ambulatory surgical center and transfers from hospice in the Point of Origin claims field instead of admission source codes for transfers from other hospitals or health facilities (including long-term care).
LA:	Rate includes FFS and managed care populations (5 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles.
MA:	Rate includes PCCM and managed care populations (5 MCOs), representing 63 percent of the population. Rate excludes FFS population, representing 37 percent of the population, but most FFS beneficiaries would not be eligible for the measure, including beneficiaries who have other insurance (commercial or Medicare), reside in a long-term care institution, or receive limited or temporary Medicaid benefits.
MI:	Rate includes FFS and managed care populations (11 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles.
MN:	Rate includes FFS and managed care populations (8 MCOs).
MO:	Rate includes FFS and managed care populations (3 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles. State identified transfers using claims data, defining a transfer as a discharge date with a subsequent admission on the same day or the next day. Transfers from a Skilled Nursing Facility or Intermediate Care Facility are identified using enrollment level of care start and stop dates. Numerator excludes admission dates that have an inpatient discharge from another facility or a facility level of care stop date on the day before or the day of the admission date.
NH:	Rate includes FFS and managed care populations (2 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles.
NY:	Rate includes FFS and managed care populations (73 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles. State conducted an internal validation of the data.
NC:	Rate includes FFS and PCCM populations. Rate excludes Medicare-Medicaid Dual Eligibles.
OK:	Rate includes FFS and PCCM populations. Rate excludes home- and community-based services waiver enrollees.
OR:	Rate includes managed care population (16 CCOs), representing 82 percent of the population. Rate excludes FFS population, representing 18 percent of the population.
PA:	Rate includes managed care population (9 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles. State provided MCOs with the following guidelines for calculating the measure: (1) include enrollees enrolled in

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the MCO at some point during the inpatient stay and continuous enrollment is not required; (2) the enrollment and disenrollment segment that overlaps with the stay and contiguous segments should be linked to show the longest continuous enrollment segment for the enrollee that overlaps with the inpatient stay; and (3) include paid and denied charges, and exclude events that were denied because the enrollee was not a member of the MCO during the stay. Data were submitted by MCOs and compiled by the state's EQRO.

- SC: Rate includes managed care population (5 MCOs). Rate excludes Medicare-Medicaid Dual Eligibles.
- TN: Rate includes managed care population (4 MCOs) age 18 and older. Rate excludes Medicare-Medicaid Dual Eligibles.
- TX: Rate includes FFS and managed care populations (23 MCOs) age 18 and older. Rate excludes Medicare-Medicaid Dual Eligibles. Rate was validated by the state's EQRO.
- VT: Rate includes statewide 1115 waiver population enrolled in a public non-risk prepaid inpatient health plan population, representing the total Medicaid population. Rate excludes Medicare-Medicaid Dual Eligibles.
- WA: Rate includes FFS and managed care populations (5 MCOs).
- WV: Rate includes FFS and managed care populations (4 MCOs). Rate includes beneficiaries who were of appropriate age at any time during the measurement year. Rate does not exclude transfers from other hospitals, skilled nursing facilities, intermediate care facilities, and other health facilities.
- WY: Rate includes FFS population.