



# **Prevention Quality Indicators (PQI) Benchmark Data Tables, v2024**

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## Introduction

The data presented in this document are nationwide comparative rates for Version 2024 of Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QI) Prevention Quality Indicators (PQI) software. The numerators, denominators, and observed rates shown in this document are based on an analysis of discharge data from the 2021 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).<sup>1</sup>

HCUP is a family of healthcare databases and related software tools and products developed through a Federal-State-Industry partnership. HCUP includes the largest collection of longitudinal hospital care data in the United States, with all-payer, encounter-level information beginning in 1988. The SID contains all-payer, encounter-level information on inpatient discharges, including clinical and resource information typically found on a billing record, such as patient demographics, up to 30 *International Classification of Diseases, Tenth Revision, Clinical Modification/Procedural Classification System (ICD-10-CM/PCS)* diagnoses and procedures, length of stay, expected payer, admission and discharge dates, and discharge disposition. In 2021, the HCUP databases represented more than 97 percent of all annual discharges in the United States.<sup>2</sup>

The analytic dataset used to generate the tables in this document consists of the same hospital discharge records that comprise the reference population for Version 2024 of the AHRQ QI software. This reference population file was limited to community hospitals and also excludes rehabilitation and long-term acute care (LTAC) hospitals. Information on the type of hospital was obtained by the American Hospital Association (AHA) Annual Survey of Hospitals. AHA defines community hospitals as “all non-Federal, short-term, general, and other specialty hospitals, excluding hospital units of institutions.” Included among community hospitals are specialty hospitals such as obstetrics-gynecology, ear-nose-throat, orthopedic, and pediatric institutions. Also included are public hospitals and academic medical centers.

The 2021 HCUP SID includes information on all inpatient discharges from hospitals in participating States. Discharges from all 48 participating States in 2021 are used to develop area-level indicators.<sup>1</sup> Additional information on the reference population and the risk adjustment process may be found in Quality Indicator Empirical Methods, available on the AHRQ QI website. (<http://www.qualityindicators.ahrq.gov/modules/Default.aspx>)

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<sup>1</sup>Healthcare Cost and Utilization Project (HCUP) 2021 State Inpatient Databases (SID). Agency for Healthcare Research and Quality, Rockville, MD.

<sup>2</sup> Introduction to the HCUP State Inpatient Databases (SID). Healthcare Cost and Utilization Project (HCUP). June 2022. Agency for Healthcare Research and Quality, Rockville, MD. [https://hcup-us.ahrq.gov/db/state/siddist/Introduction\\_to\\_SID.pdf](https://hcup-us.ahrq.gov/db/state/siddist/Introduction_to_SID.pdf).

<sup>3</sup> States with data from 2021 SID included in the area-level reference populations include: AK, AR, AZ, CA, CO, CT, DC, DE, FL, GA, HI, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, MT, NC, ND, NE, NH, NJ, NM, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, and WY.

The QI observed rates for area-level indicators are per 100,000 population. Cell sizes less than 11 are suppressed due to confidentiality and are designated by an asterisk (\*). When only one data point in a series must be suppressed due to cell sizes, another data point is provided as a range to disallow calculation of the masked variable. In some cases, numerators, denominators, or rates are not applicable for the category due to the exclusion criteria in the specification of the indicator and are designated by dashes (--).

## **Acknowledgments**

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**Table 1. Prevention Quality Indicators (PQI) For Overall Population: Area-Level Indicators**

INDICATOR	LABEL	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
PQI 01	Diabetes Short-Term Complications Admission Rate	205,495	250,605,794	82
PQI 03	Diabetes Long-Term Complications Admission Rate	274,935	250,605,972	109.71
PQI 05	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	304,648	155,593,233	195.8
PQI 07	Hypertension Admission Rate	139,047	250,605,840	55.48
PQI 08	Heart Failure Admission Rate	1,005,410	250,610,695	401.18
PQI 11	Community-Acquired Pneumonia Admission Rate	270,302	250,606,874	107.86
PQI 12	Urinary Tract Infection Admission Rate	259,445	250,606,822	103.53
PQI 14	Uncontrolled Diabetes Admission Rate	92,116	250,605,799	36.76
PQI 15	Asthma in Younger Adults Admission Rate	17,572	95,013,033	18.49
PQI 16	Lower-Extremity Amputation Among Patients With Diabetes Rate	87,094	250,605,806	34.75
PQI 90	Prevention Quality Overall Composite	2,606,785	250,622,839	1040.12
PQI 91	Prevention Quality Acute Composite	529,747	250,608,657	211.38
PQI 92	Prevention Quality Chronic Composite	2,077,071	250,616,242	828.79
PQI 93	Prevention Quality Diabetes Composite	610,816	250,606,280	243.74

**Table 2. PQI 01 - Diabetes Short-Term Complications Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	205,495	250,605,794	82
Females	94,970	127,684,076	74.38
Males	110,525	122,921,718	89.91
18 to 39 years	88,340	95,013,047	92.98
40 to 64 years	85,545	101,430,625	84.34
65 to 74 years	20,153	32,574,744	61.87
75+ years	11,457	21,587,378	53.07

**Table 3. PQI 03 - Diabetes Long-Term Complications Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	274,935	250,605,972	109.71
Females	98,608	127,684,103	77.23
Males	176,327	122,921,869	143.45
18 to 39 years	20,863	95,013,037	21.96
40 to 64 years	142,918	101,430,662	140.9
65 to 74 years	66,240	32,574,799	203.35
75+ years	44,914	21,587,474	208.06

**Table 4. PQI 05 - Chronic Obstructive Pulmonary Disease (COPD) or Asthma in**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	304,648	155,593,233	195.8
Females	178,767	80,893,836	220.99
Males	125,881	74,699,397	168.52
40 to 64 years	128,523	101,430,663	126.71
65 to 74 years	94,127	32,574,874	288.96
75+ years	81,998	21,587,696	379.84



**Table 5. PQI 07 - Hypertension Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	139,047	250,605,840	55.48
Females	76,937	127,684,119	60.26
Males	62,110	122,921,721	50.53
18 to 39 years	14,378	95,013,032	15.13
40 to 64 years	60,162	101,430,610	59.31
65 to 74 years	27,079	32,574,746	83.13
75+ years	37,428	21,587,452	173.38

**Table 6. PQI 08 - Heart Failure Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	1,005,410	250,610,695	401.18
Females	477,024	127,686,534	373.59
Males	528,386	122,924,161	429.85
18 to 39 years	29,090	95,013,037	30.62
40 to 64 years	286,995	101,430,782	282.95
65 to 74 years	236,472	32,575,441	725.92
75+ years	452,853	21,591,435	2097.37

**Table 7. PQI 11 - Community-Acquired Pneumonia Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	270,302	250,606,874	107.86
Females	139,863	127,684,631	109.54
Males	130,439	122,922,243	106.12
18 to 39 years	14,168	95,013,038	14.91
40 to 64 years	73,922	101,430,671	72.88
65 to 74 years	64,733	32,574,874	198.72
75+ years	117,479	21,588,291	544.18

**Table 8. PQI 12 - Urinary Tract Infection Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	259,445	250,606,822	103.53
Females	187,459	127,684,889	146.81
Males	71,986	122,921,933	58.56
18 to 39 years	18,875	95,013,034	19.87
40 to 64 years	46,809	101,430,618	46.15
65 to 74 years	51,373	32,574,815	157.71
75+ years	142,388	21,588,355	659.56

**Table 9. PQI 14 - Uncontrolled Diabetes Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	92,116	250,605,799	36.76
Females	44,794	127,684,073	35.08
Males	47,322	122,921,726	38.5
18 to 39 years	10,447	95,013,036	11
40 to 64 years	36,242	101,430,609	35.73
65 to 74 years	21,694	32,574,743	66.6
75+ years	23,733	21,587,411	109.94

**Table 10. PQI 15 - Asthma in Younger Adults Admission Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	17,572	95,013,033	18.49
Females	11,319	46,790,471	24.19
Males	6,253	48,222,562	12.97
18 to 39 years	17,572	95,013,033	18.49

**Table 11. PQI 16 - Lower-Extremity Amputation Among Patients With Diabetes**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	87,094	250,605,806	34.75
Females	23,677	127,684,063	18.54
Males	63,417	122,921,743	51.59
18 to 39 years	3,423	95,013,032	3.6
40 to 64 years	47,550	101,430,621	46.88
65 to 74 years	22,815	32,574,758	70.04
75+ years	13,306	21,587,395	61.64

**Table 12. PQI 90 - Prevention Quality Overall Composite\***

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	2,606,785	250,622,839	1040.12
Females	1,320,070	127,693,100	1033.78
Males	1,286,715	122,929,739	1046.71
18 to 39 years	215,410	95,013,078	226.72
40 to 64 years	882,686	101,432,491	870.22
65 to 74 years	591,417	32,578,809	1815.34
75+ years	917,272	21,598,461	4246.93

\*PQI 90 Composite includes PQI 01, 03, 05, 07, 08, 11, 12, 14, 15 and 16



Table 13. PQI 91 - Prevention Quality Acute Composite\*

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	529,747	250,608,657	211.38
Females	327,322	127,685,941	256.35
Males	202,425	122,922,716	164.68
18 to 39 years	33,043	95,013,040	34.78
40 to 64 years	120,731	101,430,701	119.03
65 to 74 years	116,106	32,575,045	356.43
75+ years	259,867	21,589,871	1203.65

\*PQI 91 Composite includes PQI 11 and 12

Table 14. PQI 92 - Prevention Quality Chronic Composite\*

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	2,077,071	250,616,242	828.79
Females	992,763	127,689,083	777.48
Males	1,084,308	122,927,159	882.07
18 to 39 years	182,367	95,013,067	191.94
40 to 64 years	761,969	101,431,910	751.21
65 to 74 years	475,320	32,577,359	1459.05
75+ years	657,415	21,593,906	3044.45

\*PQI 92 Composite includes PQI 01, 03, 05, 07, 08, 14, 15 and 16

**Table 15. PQI 93 - Prevention Quality Diabetic Composite\***

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	610,816	250,606,280	243.74
Females	248,843	127,684,224	194.89
Males	361,973	122,922,056	294.47
18 to 39 years	121,340	95,013,057	127.71
40 to 64 years	286,481	101,430,738	282.44
65 to 74 years	117,781	32,574,888	361.57
75+ years	85,214	21,587,597	394.74

\*PQI 93 Composite includes PQI 01, 03, 14 and 16