



# Prevention Quality Indicators (PQI) Benchmark Data Tables, v2021

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## Introduction

The data presented in this document are nationwide comparative rates for Version 2021 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 2018 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).

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 2018, the HCUP databases represented more than 97 percent of all annual discharges in the United States.

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 2021 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 2018 HCUP SID includes information on all inpatient discharges from hospitals in participating States. Discharges from all 48 participating States 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>)

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 (--).

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<sup>1</sup> States in the 2018 reference population for the area-level indicators 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, NJ, NM, NV, NY, OH, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, VT, WA, WI, WV, and WY.

## Acknowledgments

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## PQI Benchmark Tables

**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	203,242	247,249,840	82.20
PQI 03	Diabetes Long-Term Complications Admission Rate	269,321	247,250,168	108.93
PQI 05	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate	579,015	151,915,768	381.14
PQI 07	Hypertension Admission Rate	150,215	247,250,013	60.75
PQI 08	Heart Failure Admission Rate	1,062,125	247,257,345	429.56
PQI 11	Community-Acquired Pneumonia Admission Rate	454,057	247,253,586	183.64
PQI 12	Urinary Tract Infection Admission Rate	333,266	247,252,249	134.79
PQI 14	Uncontrolled Diabetes Admission Rate	104,150	247,249,888	42.12
PQI 15	Asthma in Younger Adults Admission Rate	27,869	95,336,870	29.23
PQI 16	Lower-Extremity Amputation Among Patients with Diabetes Rate	79,868	247,249,835	32.30
PQI 90	Prevention Quality Overall Composite	3,218,116	247,285,101	1301.38
PQI 91	Prevention Quality Acute Composite	787,323	247,257,908	318.42
PQI 92	Prevention Quality Chronic Composite	2,430,831	247,269,467	983.07
PQI 93	Prevention Quality Diabetes Composite	611,983	247,250,775	247.52

\*Rate computed among persons with diabetes, Denominator is not a rate, and not all indicators are related to diabetes

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

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	203,242	247,249,840	82.20
Females	97,724	126,769,587	77.09
Males	105,518	120,480,253	87.58
18 to 39 years	94,177	95,336,908	98.78
40 to 64 years	81,851	100,906,776	81.12
65 to 74 years	17,074	29,642,866	57.60
75+ years	10,140	21,363,290	47.46

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

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	269,321	247,250,168	108.93
Females	98,724	126,769,684	77.88
Males	170,597	120,480,484	141.60
18 to 39 years	23,036	95,336,875	24.16
40 to 64 years	145,136	100,906,876	143.83
65 to 74 years	59,199	29,642,963	199.71
75+ years	41,950	21,363,454	196.36

**Table 4. PQI 05 – Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate**

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	579,015	151,915,768	381.14
Females	346,310	79,822,722	433.85
Males	232,705	72,093,046	322.78
40 to 64 years	241,846	100,907,094	239.67
65 to 74 years	164,585	29,643,675	555.21
75+ years	172,584	21,364,999	807.79

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

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	150,215	247,250,013	60.75
Females	84,475	126,769,741	66.64
Males	65,740	120,480,272	54.56
18 to 39 years	16,233	95,336,872	17.03
40 to 64 years	67,615	100,906,759	67.01
65 to 74 years	27,419	29,642,883	92.50
75+ years	38,948	21,363,499	182.31

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

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	1,062,125	247,257,345	429.56
Females	510,415	126,773,449	402.62
Males	551,710	120,483,896	457.91
18 to 39 years	27,148	95,336,879	28.48
40 to 64 years	289,291	100,907,059	286.69
65 to 74 years	240,778	29,643,974	812.23
75+ years	504,908	21,369,433	2362.76

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

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	454,057	247,253,586	183.64
Females	245,911	126,771,588	193.98
Males	208,146	120,481,998	172.76
18 to 39 years	27,580	95,336,886	28.93
40 to 64 years	126,171	100,906,946	125.04
65 to 74 years	98,193	29,643,318	331.25
75+ years	202,113	21,366,436	945.94

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

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	333,266	247,252,249	134.79
Females	243,555	126,771,492	192.12
Males	89,711	120,480,757	74.46
18 to 39 years	28,046	95,336,876	29.42
40 to 64 years	62,797	100,906,848	62.23
65 to 74 years	60,267	29,643,066	203.31
75+ years	182,156	21,365,459	852.57

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

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	104,150	247,249,888	42.12
Females	51,808	126,769,613	40.87
Males	52,342	120,480,275	43.44
18 to 39 years	12,809	95,336,868	13.44
40 to 64 years	42,730	100,906,766	42.35
65 to 74 years	22,530	29,642,879	76.00
75+ years	26,081	21,363,375	122.08

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

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	27,869	95,336,870	29.23
Females	18,530	46,948,395	39.47
Males	9,339	48,388,475	19.30
18 to 39 years	27,869	95,336,870	29.23



**Table 11. PQI 16 – Lower-Extremity Amputation Among Patients with Diabetes Rate**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	79,868	247,249,835	32.30
Females	22,627	126,769,569	17.85
Males	57,241	120,480,266	47.51
18 to 39 years	3,176	95,336,862	3.33
40 to 64 years	43,510	100,906,756	43.12
65 to 74 years	20,059	29,642,889	67.67
75+ years	13,123	21,363,328	61.43

**Table 12. PQI 90 – Prevention Quality Overall Composite<sup>a</sup>**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	3,218,116	247,285,101	1301.38
Females	1,707,487	126,789,349	1346.71
Males	1,510,629	120,495,752	1253.68
18 to 39 years	258,386	95,337,042	271.02
40 to 64 years	1,076,845	100,911,442	1067.12
65 to 74 years	698,715	29,651,009	2356.46
75+ years	1,184,170	21,385,608	5537.23

<sup>a</sup> Composite includes PQI 01, 03, 05, 07, 08, 11, 12, 14, 15 and 16

**Table 13. PQI 91 – Prevention Quality Acute Composite<sup>a</sup>**

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 POPULATION
Overall	787,323	247,257,908	318.42
Females	489,466	126,774,768	386.09
Males	297,857	120,483,140	247.22
18 to 39 years	55,626	95,336,902	58.35
40 to 64 years	188,968	100,907,147	187.27
65 to 74 years	158,460	29,643,883	534.55
75+ years	384,269	21,369,976	1798.17

<sup>a</sup> Composite includes PQI 11 and 12

**Table 14. PQI 92 – Prevention Quality Chronic Composite<sup>a</sup>**

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	2,430,831	247,269,467	983.07
Females	1,218,035	126,779,706	960.75
Males	1,212,796	120,489,761	1006.56
18 to 39 years	202,761	95,336,983	212.68
40 to 64 years	887,895	100,909,573	879.89
65 to 74 years	540,257	29,647,853	1822.25
75+ years	799,918	21,375,058	3742.30

<sup>a</sup> Composite includes PQI 01, 03, 05, 07, 08, 14, 15 and 16

**Table 15. PQI 93 – Prevention Quality Diabetic Composite<sup>a</sup>**

<b>GROUP</b>	<b>NUMERATOR</b>	<b>DENOMINATOR</b>	<b>OBSERVED RATE PER 100,000 POPULATION</b>
Overall	611,983	247,250,775	247.52
Females	258,415	126,769,917	203.85
Males	353,568	120,480,858	293.46
18 to 39 years	131,518	95,336,935	137.95
40 to 64 years	289,319	100,907,042	286.72
65 to 74 years	107,596	29,643,105	362.97
75+ years	83,550	21,363,693	391.08

<sup>a</sup> Composite includes PQI 01, 03, 14 and 16