

AHRQ Quality Indicators™



PREVENTION QUALITY INDICATORS™ v2020 Benchmark Data Tables

Prepared for:

Agency for Healthcare Research and Quality
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<http://www.qualityindicators.ahrq.gov>

Contract No. HHSA290201800003G

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July 2020

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Introduction

The data presented in this document are nationwide comparative rates for Version 2020 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 2017 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 partnership². 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-CMS/PCS)* diagnoses and procedures, length of stay, expected payer, admission and discharge dates, and discharge disposition. In 2017, 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 2020 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 2017 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.¹

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 (--).

¹ States in the 2017 reference population for the area-level indicators include: AK, AR, AZ, CA, CO, CT, DE, DC, 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

The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID: **Alaska** State Hospital and Nursing Home Association, **Alaska** Department of Health and Social Services, **Arizona** Department of Health Services, **Arkansas** Department of Health, **California** Office of Statewide Health Planning and Development, **Colorado** Hospital Association, **Connecticut** Hospital Association, **Delaware** Division of Public Health, **District of Columbia** Hospital Association, **Florida** Agency for Health Care Administration, **Georgia** Hospital Association, **Hawaii** Laulima Data Alliance, a non-profit subsidiary of the Healthcare Association of Hawaii, University of **Hawaii**, Hilo Center for Rural Health Science, **Illinois** Department of Public Health, **Indiana** Hospital Association, **Iowa** Hospital Association, **Kansas** Hospital Association, **Kentucky** Cabinet for Health and Family Services, **Louisiana** Department of Health, **Maine** Health Data Organization, **Maryland** Health Services Cost Review Commission, **Massachusetts** Center for Health Information and Analysis, **Michigan** Health & Hospital Association, **Minnesota** Hospital Association (provides data for Minnesota and North Dakota), **Mississippi** State Department of Health, Missouri Hospital Industry Data Institute, **Missouri** Hospital Industry Data Institute, **Montana** Hospital Association, **Nebraska** Hospital Association, **Nevada** Department of Health and Human Services, **New Hampshire** Department of Health & Human Services, **New Jersey** Department of Health, **New Mexico** Department of Health, **New York** State Department of Health, **North Carolina** Department of Health and Human Services, **North Dakota** (data provided by the Minnesota Hospital Association), **Ohio** Hospital Association, **Oklahoma** State Department of Health, **Oregon** Association of Hospitals and Health Systems, **Oregon** Health Authority, **Pennsylvania** Health Care Cost Containment Council, **Rhode Island** Department of Health, **South Carolina** Revenue and Fiscal Affairs Office, **South Dakota** Association of Healthcare Organizations, **Tennessee** Hospital Association, **Texas** Department of State Health Services, **Utah** Department of Health, **Vermont** Association of Hospitals and Health Systems, **Virginia** Health Information, **Washington** State Department of Health, **West Virginia** Health Care Authority, **Wisconsin** Department of Health Services, **Wyoming** Hospital Association.

Table 1. Prevention Quality Indicators for Overall Population: Area-Level Indicators

INDICATOR	LABEL	NUMERATOR	DENOMINATOR*	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
PQI 01	Diabetes Short-Term Complications Admission Rate, per 100,000 Population	143,038	245,257,944	58.32
PQI 03	Diabetes Long-Term Complications Admission Rate, per 100,000 Population	255,234	245,258,255	104.07
PQI 05	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate, per 100,000 Population	743,537	150,567,776	493.82
PQI 07	Hypertension Admission Rate, per 100,000 Population	147,100	245,258,263	59.98
PQI 08	Heart Failure Admission Rate, per 100,000 Population	1,012,862	245,266,789	412.96
PQI 11	Community-Acquired Pneumonia Admission Rate, per 100,000 Population	389,468	245,262,164	158.80
PQI 12	Urinary Tract Infection Admission Rate, per 100,000 Population	346,527	245,260,947	141.29
PQI 14	Uncontrolled Diabetes Admission Rate, per 100,000 Population	105,486	245,258,038	43.01
PQI 15	Asthma in Younger Adults Admission Rate, per 100,000 Population	28,662	94,694,689	30.27
PQI 16	Lower - Extremity Amputation Among Patients With Diabetes Rate, per 100,000 Population	71,762	245,258,019	29.26
PQI 90	Prevention Quality Overall Composite, per 100,000 Population	3,204,435	245,300,002	1,306.33
PQI 91	Prevention Quality Acute Composite, per 100,000 Population	735,995	245,267,168	300.08
PQI 92	Prevention Quality Chronic Composite, per 100,000 Population	2,468,463	245,282,148	1,006.38
PQI 93	Prevention Quality Diabetes Composite, per 100,000 Population	536,621	245,258,743	218.80

*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, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	143,038	245,257,944	58.32
Females	70,831	125,768,147	56.32
Males	72,207	119,489,797	60.43
18 to 39 years	79,777	94,694,699	84.25
40 to 64 years	48,354	101,114,443	47.82
65 to 74 years	9,167	28,825,232	31.80
75+ years	5,740	20,623,570	27.83

Table 3. PQI 03 – Diabetes Long-Term Complications Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	255,234	245,258,255	104.07
Females	95,590	125,768,233	76.00
Males	159,644	119,490,022	133.60
18 to 39 years	24,028	94,694,684	25.37
40 to 64 years	139,229	101,114,544	137.69
65 to 74 years	53,761	28,825,316	186.51
75+ years	38,216	20,623,711	185.30

Table 4. PQI 05 – Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	743,537	150,567,776	493.82
Females	437,633	79,123,529	553.10
Males	305,904	71,444,247	428.17
40 to 64 years	294,864	101,114,961	291.61
65 to 74 years	209,954	28,826,438	728.34
75+ years	238,719	20,626,377	1,157.35

Table 5. PQI 07 – Hypertension Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	147,100	245,258,263	59.98
Females	82,545	125,768,358	65.63
Males	64,555	119,489,905	54.03
18 to 39 years	15,857	94,694,683	16.75

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GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
40 to 64 years	66,306	101,114,478	65.58
65 to 74 years	26,740	28,825,287	92.77
75+ years	38,197	20,623,815	185.21

Table 6. PQI 08 – Heart Failure Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	1,012,862	245,266,789	412.96
Females	490,502	125,772,648	389.99
Males	522,360	119,494,141	437.14
18 to 39 years	25,361	94,694,688	26.78
40 to 64 years	273,466	101,114,723	270.45
65 to 74 years	227,496	28,826,383	789.19
75+ years	486,539	20,630,995	2,358.29

Table 7. PQI 11 – Community-Acquired Pneumonia Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	389,468	245,262,164	158.80
Females	212,078	125,770,379	168.62
Males	177,390	119,491,785	148.45
18 to 39 years	28,405	94,694,692	30.00
40 to 64 years	106,087	101,114,668	104.92
65 to 74 years	77,405	28,825,674	268.53
75+ years	177,571	20,627,130	860.86

Table 8. PQI 12 – Urinary Tract Infection Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	346,527	245,260,947	141.29
Females	254,397	125,770,527	202.27
Males	92,130	119,490,420	77.10
18 to 39 years	31,245	94,694,700	33.00
40 to 64 years	65,679	101,114,529	64.96
65 to 74 years	62,040	28,825,473	215.23
75+ years	187,563	20,626,245	909.34

Table 9. PQI 14 – Uncontrolled Diabetes Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	105,486	245,258,038	43.01
Females	52,326	125,768,176	41.61
Males	53,160	119,489,862	44.49
18 to 39 years	13,289	94,694,682	14.03
40 to 64 years	43,766	101,114,453	43.28
65 to 74 years	22,483	28,825,258	78.00
75+ years	25,948	20,623,645	125.82

Table 10. PQI 15 – Asthma in Younger Adults Admission Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	28,662	94,694,689	30.27
Females	18,983	46,647,160	40.69
Males	9,679	48,047,529	20.14
18 to 39 years	28,662	94,694,689	30.27

Table 11. PQI 16 – Lower-Extremity Amputation Among Patients With Diabetes Rate, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	71,762	245,258,019	29.26
Females	20,608	125,768,151	16.39
Males	51,154	119,489,868	42.81
18 to 39 years	2,816	94,694,681	2.97
40 to 64 years	39,087	101,114,466	38.66
65 to 74 years	17,928	28,825,258	62.20
75+ years	11,931	20,623,614	57.85

Table 12. PQI 90 – Prevention Quality Overall Composite^a, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	3,204,435	245,300,002	1,306.33
Females	1,724,492	125,791,588	1,370.91
Males	1,479,943	119,508,414	1,238.36
18 to 39 years	247,962	94,694,789	261.85
40 to 64 years	1,055,747	101,119,224	1,044.06
65 to 74 years	697,084	28,834,682	2,417.52
75+ years	1,203,642	20,651,307	5,828.41

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^a Composite includes PQI 1, 3, 5, 7, 8, 11, 12, 14, 15 and 16

Table 13. PQI 91 – Prevention Quality Acute Composite^a, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	735,995	245,267,168	300.08
Females	466,475	125,774,092	370.88
Males	269,520	119,493,076	225.55
18 to 39 years	59,650	94,694,713	62.99
40 to 64 years	171,766	101,114,852	169.87
65 to 74 years	139,445	28,826,210	483.74
75+ years	365,134	20,631,393	1,769.80

^a Composite includes PQI 11 and 12

Table 14. PQI 92 – Prevention Quality Chronic Composite^a, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	2,468,463	245,282,148	1,006.38
Females	1,258,026	125,780,491	1,000.18
Males	1,210,437	119,501,657	1,012.90
18 to 39 years	188,312	94,694,736	198.86
40 to 64 years	883,988	101,117,436	874.22
65 to 74 years	557,649	28,831,063	1,934.20
75+ years	838,514	20,638,913	4,062.78

^a Composite includes PQI 1, 3, 5, 7, 8, 14, 15 and 16

Table 15. PQI 93 – Prevention Quality Diabetic Composite^a, per 100,000 Population

GROUP	NUMERATOR	DENOMINATOR	OBSERVED RATE PER 100,000 (=OBSERVED RATE*100,000)
Overall	536,621	245,258,743	218.80
Females	228,455	125,768,394	181.65
Males	308,166	119,490,349	257.90
18 to 39 years	118,435	94,694,709	125.07
40 to 64 years	249,490	101,114,669	246.74
65 to 74 years	93,574	28,825,407	324.62
75+ years	75,122	20,623,958	364.25

^a Composite includes PQI 1, 3, 14 and 16