



Inpatient Quality Indicators (IQI) 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) Inpatient Quality Indicators (IQI) software. The numerators, denominators, and observed rates shown in this document are based on an analysis of discharge data from the 2019, 2020, and 2021 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID).¹

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 percent² 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 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.

There are indicators of the diagnoses being present on admission (POA) in the SID for 45 states in 2019, 46 states in 2020, and 45 states in 2021.³ Discharges from these participating States are used to develop hospital-level indicators. Edit checks on POA were developed during an HCUP evaluation of POA coding in the 2011 SID at hospitals that were required to report POA to the Centers for Medicare & Medicaid Services (CMS, <http://www.hcup-us.ahrq.gov/reports/methods/2015-06.pdf>). The edits identify general patterns of suspect

¹Healthcare Cost and Utilization Project (HCUP) 2019, 2020, and 2021 State Inpatient Databases (SID). Agency for Healthcare Research and Quality, Rockville, MD.

²Introduction 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%20to%20SID.pdf).

³States with data from 2019 included in the reference population for the hospital-level indicators are AK, AR, AZ, CA, CO, DC, 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, and WV. States with data from 2020 included in the reference population are the states with 2019 data plus WY. States with data from 2021 included in the reference population are AK, AR, AZ, CA, CO, DC, 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, and WV.

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reporting of POA. The edits do not evaluate whether a valid POA value (e.g., Y or N) is appropriate for the specific diagnosis. There are three hospital-level edit checks:

1. Indication that a hospital has POA reported as Y on all diagnoses on all discharges
2. Indication that a hospital has POA reported as missing on all non-Medicare discharges
3. Indication that a hospital reported POA as missing on all nonexempt diagnoses for 15 percent or more of discharges. The cut-point of 15 percent was determined by subtracting 2 times the standard deviation from the mean of the percentage for hospitals that are required to report POA to CMS.

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 hospital-level indicators are scaled to the rate per 1,000 persons at risk. 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.

Acknowledgements

The AHRQ QI program would like to acknowledge the HCUP Partner organizations that participated in the HCUP SID and SEDD: **Alaska** Department of Health, **Arizona** Department of Health Services, **Arkansas** Department of Health, **California** Department of Health Care Access and Information, **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 , **Hawaii** University of Hawaii at Hilo, **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, **Mississippi** State Department of Health, **Missouri** Hospital Industry Data Institute, **Montana** Hospital Association, **Nebraska** Hospital Association, **Nevada** Center for Health Information Analysis, **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** Apprise Health Insights, **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** Department of Health and Human Resources, **Wisconsin** Department of Health Services, and **Wyoming** Hospital Association.

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Table 1. Inpatient Quality Indicators (IQI) For Overall Population: Hospital-level Indicators

| INDICATOR | LABEL | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--|--|-----------|-------------|------------------------------------|
| IQI 08 | Esophageal Resection Mortality Rate | 583 | 16,387 | 35.58 |
| IQI 09 | Pancreatic Resection Mortality Rate | 1,526 | 59,902 | 25.47 |
| IQI 09 Stratum_WITH_CAN CER | Pancreatic Resection Mortality Rate Stratum: Presence of Pancreatic Cancer | 704 | 32,159 | 21.89 |
| IQI 09 Stratum_WITHOUT_ CANCER | Pancreatic Resection Mortality Rate Stratum: Absence of Pancreatic Cancer | 822 | 27,743 | 29.63 |
| IQI 11 | Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate | 3,621 | 99,537 | 36.38 |
| IQI 11 Stratum_OPEN_RUPT URED | Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate Stratum_OPEN_RUPTURED: Open Repair of Ruptured AAA | 1,178 | 3,237 | 363.92 |
| IQI 11 Stratum_OPEN_UNR UPTURED | Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate Stratum_OPEN_UNRUPTURED: Open Repair of Unruptured AAA | 671 | 11,966 | 56.08 |
| IQI 11 Stratum_ENDO_RUP TURED | Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate Stratum_ENDO_RUPTURED: Endovascular Repair of Ruptured AAA | 1,155 | 6,065 | 190.44 |
| IQI 11 Stratum_ENDO_UNR UPTURED | Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate Stratum_ENDO_UNRUPTURED: Endovascular Repair of Unruptured AAA | 617 | 78,269 | 7.88 |
| IQI 12 | Coronary Artery Bypass Graft (CABG) Mortality Rate | 12,775 | 514,509 | 24.83 |
| IQI 15 | Acute Myocardial Infarction (AMI) Mortality Rate | 79,701 | 1,536,577 | 51.87 |
| IQI 16 | Heart Failure Mortality Rate | 89,335 | 3,289,432 | 27.16 |
| IQI 17 | Acute Stroke Mortality Rate | 124,201 | 1,818,710 | 68.29 |
| IQI 17 Stratum_HEMSTROK E SUBARACH | Acute Stroke Mortality Rate Stratum_HEMSTROKE_SUBARACH: Subarachnoid Hemorrhage | 12,887 | 66,331 | 194.28 |
| IQI 17 Stratum_HEMSTROK E INTRACER | Acute Stroke Mortality Rate Stratum_HEMSTROKE_INTRACER: Intracerebral Hemorrhage | 52,240 | 281,178 | 185.79 |

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| INDICATOR | LABEL | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|------------------------------------|---|-----------|-------------|------------------------------------|
| IQI 17 Stratum_ISCHEMSTR OKE | Acute Stroke Mortality Rate Stratum_ISCHEMSTROKE: Ischemic Stroke | 59,074 | 1,471,201 | 40.15 |
| IQI 18 | Gastrointestinal Hemorrhage Mortality Rate | 38,282 | 1,506,928 | 25.40 |
| IQI 19 | Hip Fracture Mortality Rate | 15,638 | 801,169 | 19.52 |
| IQI 20 | Pneumonia Mortality Rate | 238,409 | 3,496,000 | 68.19 |
| IQI 21 | Cesarean Delivery Rate - Uncomplicated | 2,474,611 | 8,834,237 | 280.12 |
| IQI 22 | Vaginal Birth After Cesarean (VBAC) Delivery Rate - Uncomplicated | 219,711 | 1,553,619 | 141.42 |
| IQI 30 | Percutaneous Coronary Intervention (PCI) Mortality Rate | 41,520 | 1,253,386 | 33.13 |
| IQI 31 | Carotid Endarterectomy Mortality Rate | 761 | 175,952 | 4.33 |
| IQI 33 | Primary Cesarean Delivery Rate - Uncomplicated | 1,144,448 | 7,280,618 | 157.19 |

Table 2. IQI 08 - Esophageal Resection Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------|-------------|------------------------------------|
| Overall | 583 | 16,387 | 35.58 |
| Females | 132 | 3,133 | 42.13 |
| Males | 451 | 13,254 | 34.03 |
| 18 to 39 years | ***** | 293 | ***** |
| 40 to 64 years | 166 -- 175 | 7,210 | 23.02 -- 24.27 |
| 65 to 74 years | 270 | 6,502 | 41.53 |
| 75+ years | 135 | 2,382 | 56.68 |
| Private | 131 -- 140 | 6,306 | 20.77 -- 22.20 |
| Medicare | 371 | 8,121 | 45.68 |
| Medicaid | 46 | 1,208 | 38.08 |
| Other | 30 | 564 | 53.19 |
| Uninsured (self-pay/no charge) | ***** | 188 | ***** |

***** Obscured due to small sample size

Table 3. IQI 09 - Pancreatic Resection Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 1,526 | 59,902 | 25.47 |
| Females | 557 | 29,507 | 18.88 |
| Males | 969 | 30,395 | 31.88 |
| 18 to 39 years | 164 | 4,374 | 37.49 |
| 40 to 64 years | 467 | 23,707 | 19.7 |
| 65 to 74 years | 491 | 20,044 | 24.5 |
| 75+ years | 404 | 11,777 | 34.3 |
| Private | 357 | 21,781 | 16.39 |
| Medicare | 861 | 29,831 | 28.86 |
| Medicaid | 183 | 5,299 | 34.53 |
| Other | 61 | 1,651 | 36.95 |
| Uninsured (self-pay/no charge) | 64 | 1,340 | 47.76 |

Table 4. IQI 09 - Pancreatic Resection Mortality Rate Stratum: Presence of Pancreatic Cancer

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------|-------------|------------------------------------|
| Overall | 704 | 32,159 | 21.89 |
| Females | 283 | 15,460 | 18.31 |
| Males | 421 | 16,699 | 25.21 |
| 18 to 39 years | ***** | 629 | ***** |
| 40 to 64 years | 170 -- 179 | 11,275 | 15.08 -- 15.88 |
| 65 to 74 years | 279 | 12,279 | 22.72 |
| 75+ years | 247 | 7,976 | 30.97 |
| Private | 148 | 10,336 | 14.32 |
| Medicare | 483 | 18,482 | 26.13 |
| Medicaid | 41 | 2,034 | 20.16 |
| Other | 21 | 798 | 26.32 |
| Uninsured (self-pay/no charge) | 11 | 509 | 21.61 |

***** Obscured due to small sample size

Table 5. IQI 09 - Pancreatic Resection Mortality Rate Stratum: Absence of Pancreatic Cancer

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 822 | 27,743 | 29.63 |
| Females | 274 | 14,047 | 19.51 |
| Males | 548 | 13,696 | 40.01 |
| 18 to 39 years | 160 | 3,745 | 42.72 |
| 40 to 64 years | 293 | 12,432 | 23.57 |
| 65 to 74 years | 212 | 7,765 | 27.3 |
| 75+ years | 157 | 3,801 | 41.3 |
| Private | 209 | 11,445 | 18.26 |
| Medicare | 378 | 11,349 | 33.31 |
| Medicaid | 142 | 3,265 | 43.49 |
| Other | 40 | 853 | 46.89 |
| Uninsured (self-pay/no charge) | 53 | 831 | 63.78 |

Table 6. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 3,621 | 99,537 | 36.38 |
| Females | 1,086 | 21,039 | 51.62 |
| Males | 2,535 | 78,498 | 32.29 |
| 18 to 39 years | 13 | 146 | 89.04 |
| 40 to 64 years | 440 | 15,884 | 27.7 |
| 65 to 74 years | 1,283 | 39,615 | 32.39 |
| 75+ years | 1,885 | 43,892 | 42.95 |
| Private | 453 | 15,470 | 29.28 |
| Medicare | 2,860 | 76,367 | 37.45 |
| Medicaid | 136 | 3,524 | 38.59 |
| Other | 92 | 3,015 | 30.51 |
| Uninsured (self-pay/no charge) | 80 | 1,161 | 68.91 |

Table 7. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate
Stratum_OPEN_RUPTURED: Open Repair of Ruptured AAA

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 1,178 | 3,237 | 363.92 |
| Females | 319 | 791 | 403.29 |
| Males | 859 | 2,446 | 351.19 |
| 18 to 39 years | ***** | 19 | ***** |
| 40 to 64 years | 163 -- 172 | 701 | 232.52 -- 245.36 |
| 65 to 74 years | 442 | 1,292 | 342.11 |
| 75+ years | 564 | 1,225 | 460.41 |
| Private | 159 | 551 | 288.57 |
| Medicare | 910 | 2,281 | 398.95 |
| Medicaid | 46 | 202 | 227.72 |
| Other | 25 | 92 | 271.74 |
| Uninsured (self-pay/no charge) | 38 | 111 | 342.34 |

***** Obscured due to small sample size

Table 8. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate
Stratum_OPEN_UNRUPTURED: Open Repair of Unruptured AAA

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 671 | 11,966 | 56.08 |
| Females | 226 | 3,198 | 70.67 |
| Males | 445 | 8,768 | 50.75 |
| 18 to 39 years | ***** | 76 | ***** |
| 40 to 64 years | 89 -- 98 | 3,236 | 27.50 -- 30.28 |
| 65 to 74 years | 275 | 5,295 | 51.94 |
| 75+ years | 295 | 3,359 | 87.82 |
| Private | 68 -- 77 | 2,675 | 25.42 -- 28.79 |
| Medicare | 533 | 7,993 | 66.68 |
| Medicaid | 35 | 733 | 47.75 |
| Other | 18 | 369 | 48.78 |
| Uninsured (self-pay/no charge) | ***** | 196 | ***** |

***** Obscured due to small sample size

Table 9. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate
Stratum_ENDO_RUPTURED: Endovascular Repair of Ruptured AAA

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------|-------------|------------------------------------|
| Overall | 1,155 | 6,065 | 190.44 |
| Females | 315 | 1,387 | 227.11 |
| Males | 840 | 4,678 | 179.56 |
| 18 to 39 years | ***** | 14 | ***** |
| 40 to 64 years | 132 -- 141 | 1,108 | 119.13 -- 127.26 |
| 65 to 74 years | 368 | 2,180 | 168.81 |
| 75+ years | 651 | 2,763 | 235.61 |
| Private | 166 | 961 | 172.74 |
| Medicare | 893 | 4,471 | 199.73 |
| Medicaid | 34 | 275 | 123.64 |
| Other | 32 | 198 | 161.62 |
| Uninsured (self-pay/no charge) | 30 | 160 | 187.5 |

***** Obscured due to small sample size

Table 10. IQI 11 - Abdominal Aortic Aneurysm (AAA) Repair Mortality Rate
Stratum_ENDO_UNRUPTURED: Endovascular Repair of Unruptured AAA

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 617 | 78,269 | 7.88 |
| Females | 226 | 15,663 | 14.43 |
| Males | 391 | 62,606 | 6.25 |
| 18 to 39 years | ***** | 37 | ***** |
| 40 to 64 years | 35 -- 44 | 10,839 | 3.23 -- 4.06 |
| 65 to 74 years | 198 | 30,848 | 6.42 |
| 75+ years | 375 | 36,545 | 10.26 |
| Private | 49 -- 58 | 11,283 | 4.34 -- 5.14 |
| Medicare | 524 | 61,622 | 8.5 |
| Medicaid | 21 | 2,314 | 9.08 |
| Other | 17 | 2,356 | 7.22 |
| Uninsured (self-pay/no charge) | ***** | 694 | ***** |

***** Obscured due to small sample size

Table 11. IQI 12 - Coronary Artery Bypass Graft (CABG) Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 12,775 | 514,509 | 24.83 |
| Females | 4,597 | 122,241 | 37.61 |
| Males | 8,178 | 392,268 | 20.85 |
| 40 to 64 years | 3,410 | 201,986 | 16.88 |
| 65 to 74 years | 4,822 | 201,023 | 23.99 |
| 75+ years | 4,543 | 111,500 | 40.74 |
| Private | 2,260 | 154,610 | 14.62 |
| Medicare | 8,936 | 289,996 | 30.81 |
| Medicaid | 857 | 37,215 | 23.03 |
| Other | 393 | 17,747 | 22.14 |
| Uninsured (self-pay/no charge) | 329 | 14,941 | 22.02 |

Table 12. IQI 15 - Acute Myocardial Infarction (AMI) Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 79,701 | 1,536,577 | 51.87 |
| Females | 31,833 | 559,232 | 56.92 |
| Males | 47,868 | 977,345 | 48.98 |
| 18 to 39 years | 675 | 36,107 | 18.69 |
| 40 to 64 years | 18,970 | 634,458 | 29.9 |
| 65 to 74 years | 21,230 | 411,949 | 51.54 |
| 75+ years | 38,826 | 454,063 | 85.51 |
| Private | 11,866 | 404,352 | 29.35 |
| Medicare | 56,292 | 845,716 | 66.56 |
| Medicaid | 5,667 | 151,833 | 37.32 |
| Other | 2,446 | 51,159 | 47.81 |
| Uninsured (self-pay/no charge) | 3,430 | 83,517 | 41.07 |

Table 13. IQI 16 - Heart Failure Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 89,335 | 3,289,432 | 27.16 |
| Females | 40,797 | 1,554,950 | 26.24 |
| Males | 48,538 | 1,734,482 | 27.98 |
| 18 to 39 years | 1,057 | 91,319 | 11.57 |
| 40 to 64 years | 13,990 | 931,155 | 15.02 |
| 65 to 74 years | 18,781 | 768,022 | 24.45 |
| 75+ years | 55,507 | 1,498,936 | 37.03 |
| Private | 8,846 | 377,432 | 23.44 |
| Medicare | 70,301 | 2,339,420 | 30.05 |
| Medicaid | 5,710 | 391,763 | 14.58 |
| Other | 3,073 | 72,684 | 42.28 |
| Uninsured (self-pay/no charge) | 1,405 | 108,133 | 12.99 |

Table 14. IQI 17 - Acute Stroke Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 124,201 | 1,818,710 | 68.29 |
| Females | 62,038 | 887,541 | 69.9 |
| Males | 62,163 | 931,169 | 66.76 |
| 18 to 39 years | 3,481 | 53,055 | 65.61 |
| 40 to 64 years | 34,192 | 589,382 | 58.01 |
| 65 to 74 years | 27,832 | 455,962 | 61.04 |
| 75+ years | 58,696 | 720,311 | 81.49 |
| Private | 19,927 | 360,850 | 55.22 |
| Medicare | 80,190 | 1,130,797 | 70.91 |
| Medicaid | 12,520 | 190,525 | 65.71 |
| Other | 4,792 | 49,864 | 96.1 |
| Uninsured (self-pay/no charge) | 6,772 | 86,674 | 78.13 |

Table 15. IQI 17 - Acute Stroke Mortality Rate Stratum_HEMSTROKE_SUBARACH:
 Subarachnoid Hemorrhage

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 12,887 | 66,331 | 194.28 |
| Females | 7,853 | 40,696 | 192.97 |
| Males | 5,034 | 25,635 | 196.37 |
| 18 to 39 years | 909 | 5,971 | 152.24 |
| 40 to 64 years | 5,479 | 32,987 | 166.1 |
| 65 to 74 years | 2,933 | 13,893 | 211.11 |
| 75+ years | 3,566 | 13,480 | 264.54 |
| Private | 3,252 | 22,338 | 145.58 |
| Medicare | 6,097 | 26,632 | 228.94 |
| Medicaid | 1,884 | 10,508 | 179.29 |
| Other | 434 | 2,041 | 212.64 |
| Uninsured (self-pay/no charge) | 1,220 | 4,812 | 253.53 |

**Table 16. IQI 17 - Acute Stroke Mortality Rate Stratum_HEMSTROKE_INTRACER:
 Intracerebral Hemorrhage**

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 52,240 | 281,178 | 185.79 |
| Females | 24,226 | 123,481 | 196.19 |
| Males | 28,014 | 157,697 | 177.64 |
| 18 to 39 years | 1,801 | 11,939 | 150.85 |
| 40 to 64 years | 16,247 | 93,456 | 173.85 |
| 65 to 74 years | 11,802 | 67,555 | 174.7 |
| 75+ years | 22,390 | 108,228 | 206.88 |
| Private | 8,586 | 56,287 | 152.54 |
| Medicare | 32,498 | 168,483 | 192.89 |
| Medicaid | 5,934 | 33,614 | 176.53 |
| Other | 1,890 | 8,245 | 229.23 |
| Uninsured (self-pay/no charge) | 3,332 | 14,549 | 229.02 |

Table 17. IQI 17 - Acute Stroke Mortality Rate Stratum_ISCHEMSTROKE: Ischemic Stroke

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 59,074 | 1,471,201 | 40.15 |
| Females | 29,959 | 723,364 | 41.42 |
| Males | 29,115 | 747,837 | 38.93 |
| 18 to 39 years | 771 | 35,145 | 21.94 |
| 40 to 64 years | 12,466 | 462,939 | 26.93 |
| 65 to 74 years | 13,097 | 374,514 | 34.97 |
| 75+ years | 32,740 | 598,603 | 54.69 |
| Private | 8,089 | 282,225 | 28.66 |
| Medicare | 41,595 | 935,682 | 44.45 |
| Medicaid | 4,702 | 146,403 | 32.12 |
| Other | 2,468 | 39,578 | 62.36 |
| Uninsured (self-pay/no charge) | 2,220 | 67,313 | 32.98 |

Table 18. IQI 18 - Gastrointestinal Hemorrhage Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 38,282 | 1,506,928 | 25.4 |
| Females | 15,614 | 705,498 | 22.13 |
| Males | 22,668 | 801,430 | 28.28 |
| 18 to 39 years | 1,480 | 104,313 | 14.19 |
| 40 to 64 years | 11,746 | 457,169 | 25.69 |
| 65 to 74 years | 8,457 | 354,196 | 23.88 |
| 75+ years | 16,599 | 591,250 | 28.07 |
| Private | 5,326 | 262,371 | 20.3 |
| Medicare | 24,683 | 956,189 | 25.81 |
| Medicaid | 5,376 | 183,769 | 29.25 |
| Other | 1,235 | 38,326 | 32.22 |
| Uninsured (self-pay/no charge) | 1,662 | 66,273 | 25.08 |

Table 19. IQI 19 - Hip Fracture Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 15,638 | 801,169 | 19.52 |
| Females | 9,030 | 561,032 | 16.1 |
| Males | 6,608 | 240,137 | 27.52 |
| 65 to 74 years | 1,871 | 176,106 | 10.62 |
| 75+ years | 13,767 | 625,063 | 22.02 |
| Private | 902 | 47,940 | 18.82 |
| Medicare | 14,082 | 725,634 | 19.41 |
| Medicaid | 164 | 8,161 | 20.1 |
| Other | 408 | 14,939 | 27.31 |
| Uninsured (self-pay/no charge) | 82 | 4,495 | 18.24 |

Table 20. IQI 20 - Pneumonia Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 238,409 | 3,496,000 | 68.19 |
| Females | 103,875 | 1,695,789 | 61.25 |
| Males | 134,534 | 1,800,211 | 74.73 |
| 18 to 39 years | 5,932 | 259,799 | 22.83 |
| 40 to 64 years | 54,294 | 1,050,355 | 51.69 |
| 65 to 74 years | 57,111 | 797,550 | 71.61 |
| 75+ years | 121,072 | 1,388,296 | 87.21 |
| Private | 33,514 | 585,523 | 57.24 |
| Medicare | 170,452 | 2,284,409 | 74.62 |
| Medicaid | 21,131 | 416,122 | 50.78 |
| Other | 7,852 | 89,141 | 88.09 |
| Uninsured (self-pay/no charge) | 5,460 | 120,805 | 45.2 |

Table 21. IQI 21 - Cesarean Delivery Rate - Uncomplicated

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 2,474,611 | 8,834,237 | 280.12 |
| Females | 2,474,611 | 8,834,237 | 280.12 |
| 0 to 17 years | 13,841 | 99,754 | 138.75 |
| 18 to 39 years | 2,333,339 | 8,437,205 | 276.55 |
| 40 to 64 years | 127,431 | 297,278 | 428.66 |
| Private | 1,321,255 | 4,665,763 | 283.18 |
| Medicare | 19,285 | 52,547 | 367 |
| Medicaid | 1,009,654 | 3,632,812 | 277.93 |
| Other | 64,829 | 251,928 | 257.33 |
| Uninsured (self-pay/no charge) | 59,588 | 231,187 | 257.75 |

Table 22. IQI 22 - Vaginal Birth After Cesarean (VBAC) Delivery Rate, Uncomplicated

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 219,711 | 1,553,619 | 141.42 |
| Females | 219,711 | 1,553,619 | 141.42 |
| 0 to 17 years | 163 | 961 | 169.61 |
| 18 to 39 years | 209,532 | 1,466,605 | 142.87 |
| 40 to 64 years | 10,016 | 86,053 | 116.39 |
| Private | 105,519 | 762,305 | 138.42 |
| Medicare | 1,316 | 12,356 | 106.51 |
| Medicaid | 98,527 | 695,495 | 141.66 |
| Other | 6,858 | 41,189 | 166.5 |
| Uninsured (self-pay/no charge) | 7,491 | 42,274 | 177.2 |

Table 23. IQI 30 - Percutaneous Coronary Intervention (PCI) Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------------|--------------------|---|
| Overall | 41,520 | 1,253,386 | 33.13 |
| Females | 15,753 | 408,005 | 38.61 |
| Males | 25,767 | 845,381 | 30.48 |
| 40 to 64 years | 11,759 | 551,560 | 21.32 |
| 65 to 74 years | 12,566 | 369,390 | 34.02 |
| 75+ years | 17,195 | 332,436 | 51.72 |
| Private | 7,038 | 344,966 | 20.4 |
| Medicare | 28,222 | 689,165 | 40.95 |
| Medicaid | 3,133 | 114,258 | 27.42 |
| Other | 1,238 | 42,456 | 29.16 |
| Uninsured (self-pay/no charge) | 1,889 | 62,541 | 30.2 |

Table 24. IQI 31 - Carotid Endarterectomy Mortality Rate

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|------------|-------------|------------------------------------|
| Overall | 761 | 175,952 | 4.33 |
| Females | 294 | 70,492 | 4.17 |
| Males | 467 | 105,460 | 4.43 |
| 18 to 39 years | ***** | 254 | ***** |
| 40 to 64 years | 115 -- 124 | 38,533 | 2.98 -- 3.22 |
| 65 to 74 years | 240 | 70,484 | 3.41 |
| 75+ years | 391 | 66,681 | 5.86 |
| Private | 104 | 31,505 | 3.3 |
| Medicare | 573 | 129,360 | 4.43 |
| Medicaid | 43 | 8,400 | 5.12 |
| Other | 26 | 4,244 | 6.13 |
| Uninsured (self-pay/no charge) | 15 | 2,443 | 6.14 |

***** Obscured due to small sample size

Table 25. IQI 33 - Primary Cesarean Delivery Rate, Uncomplicated

| GROUP | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 DISCHARGES |
|--------------------------------|-----------|-------------|------------------------------------|
| Overall | 1,144,448 | 7,280,618 | 157.19 |
| Females | 1,144,448 | 7,280,618 | 157.19 |
| 0 to 17 years | 13,046 | 98,793 | 132.05 |
| 18 to 39 years | 1,079,884 | 6,970,600 | 154.92 |
| 40 to 64 years | 51,518 | 211,225 | 243.9 |
| Private | 665,944 | 3,903,458 | 170.6 |
| Medicare | 8,287 | 40,191 | 206.19 |
| Medicaid | 414,676 | 2,937,317 | 141.18 |
| Other | 30,556 | 210,739 | 144.99 |
| Uninsured (self-pay/no charge) | 24,985 | 188,913 | 132.26 |