



PATIENT SAFETY INDICATORS™ v5.0 BENCHMARK DATA TABLES

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Contents

| | |
|--|----------|
| Introduction..... | 3 |
| Table 1. Patient Safety Provider-Level Indicators for Overall Population..... | 4 |
| Table 2. Patient Safety Area-Level Indicators for Overall Population..... | 5 |
| Table 3. PSI #2 - Death Rate in Low-Mortality Diagnosis Related Groups (DRGs)..... | 6 |
| Table 4. PSI #3 – Pressure Ulcer Rate..... | 6 |
| Table 5. PSI #4 – Death Rate among Surgical Inpatients with Serious Treatable Complications..... | 6 |
| Table 6. PSI #4A – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum A..... | 7 |
| Table 7. PSI #4B – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum B..... | 7 |
| Table 8. PSI #4C – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum C..... | 7 |
| Table 9. PSI #4D – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum D..... | 8 |
| Table 10. PSI #4E – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum E..... | 8 |
| Table 11. PSI #5 – Retained Surgical Item or Unretrieved Device Fragment Count..... | 8 |
| Table 12. PSI #6 – Iatrogenic Pneumothorax Rate..... | 9 |
| Table 13. PSI #7 – Central Venous Catheter-Related Blood Stream Infection Rate..... | 9 |
| Table 14. PSI #8 – Postoperative Hip Fracture Rate..... | 9 |
| Table 15. PSI #9 – Perioperative Hemorrhage or Hematoma Rate..... | 10 |
| Table 16. PSI #10 – Postoperative Physiologic and Metabolic Derangement Rate..... | 10 |
| Table 17. PSI #11 – Postoperative Respiratory Failure Rate..... | 10 |
| Table 18. PSI #12 – Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate | 11 |
| Table 19. PSI #13 – Postoperative Sepsis Rate..... | 11 |
| Table 20. PSI #14 – Postoperative Wound Dehiscence Rate..... | 11 |
| Table 21. PSI #15 – Accidental Puncture or Laceration Rate..... | 12 |
| Table 22. PSI #16 – Transfusion Reaction Count..... | 12 |
| Table 23. PSI #18 – Obstetric Trauma Rate – Vaginal Delivery With Instrument..... | 12 |
| Table 24. PSI #19 – Obstetric Trauma Rate – Vaginal Delivery Without Instrument..... | 13 |

Introduction

The data presented in this document are nationwide comparative rates for the Agency for Healthcare Research and Quality (AHRQ) Quality Indicators™ QIs. The rates are based on analysis of 45 States from the 2012 AHRQ Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID)¹. HCUP is a family of health care 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, Ninth Revision, Clinical Modification diagnoses and procedures, length of stay, expected payer, admission and discharge dates, and discharge disposition. In 2012, the HCUP databases represented more than 95 percent of all annual discharges in the United States. The dataset analyzed to generate the tables in this document consists of the same hospital discharge records that comprise the reference population for Version the 5.0 Version of the AHRQ QI software.

With Version 5.0 of the software, the indicators are no longer calculated using a software option that models the effect of missing present on admission data. The QI observed rates for provider-level indicators are scaled to the rate per 1,000 persons at risk and the area-level indicators are per 100,000. Volume and count indicator results are listed as simple counts with no scaling at all. Rates for any cells with 1 to 10 cases are not presented.

The tables below are calculated for the overall reference population.

1 The states included in the analysis are Alaska, Arkansas, Arizona, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Iowa, Illinois, Indiana, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Michigan, Minnesota, Missouri, Montana, North Carolina, Nebraska, New Jersey, New Mexico, Nevada, New York, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, West Virginia, and Wyoming.

2 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, Arizona Department of Health Services, Arkansas Department of Health, California Office of Statewide Health Planning and Development, Colorado Hospital Association, Connecticut Hospital Association, Florida Agency for Health Care Administration, Georgia Hospital Association, Hawaii Health Information Corporation, 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 and Hospitals, 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 Department of Health, Missouri Hospital Industry Data Institute, Montana MHA - An Association of Montana Health Care Providers, 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 Policy and Research, Pennsylvania Health Care Cost Containment Council, Rhode Island Department of Health, South Carolina Budget & Control Board, 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. Patient Safety Provider-Level Indicators for Overall Population

| INDICATOR | LABEL | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|-----------|---|-----------|-------------|---|
| | PROVIDER -LEVEL INDICATORS | | | |
| PSI #2 | Death Rate in Low-Mortality Diagnosis Related Groups (DRGs) | 1,822 | 5,636,599 | 0.32 |
| PSI #3 | Pressure Ulcer Rate | 2,804 | 5,606,091 | 0.5 |
| PSI #4 | Death Rate among Surgical Inpatients with Serious Treatable Complications | 22,014 | 185,587 | 118.62 |
| PSI #4A | Death Rate among Surgical Inpatients with Serious Treatable Complications - Stratum A | 1,258 | 26,659 | 47.19 |
| PSI #4B | Death Rate among Surgical Inpatients with Serious Treatable Complications - Stratum B | 6,151 | 81,902 | 75.1 |
| PSI #4C | Death Rate among Surgical Inpatients with Serious Treatable Complications - Stratum C | 5,622 | 28,088 | 200.16 |
| PSI #4D | Death Rate among Surgical Inpatients with Serious Treatable Complications - Stratum D | 7,706 | 22,388 | 344.2 |
| PSI #4E | Death Rate among Surgical Inpatients with Serious Treatable Complications - Stratum E | 1,277 | 26,550 | 48.1 |
| PSI #5 | Retained Surgical Item or Unretrieved Device Fragment Count | 973 | . | . |
| PSI #6 | Iatrogenic Pneumothorax Rate | 6,418 | 19,129,500 | 0.34 |
| PSI #7 | Central Venous Catheter-Related Blood Stream Infection Rate | 3,215 | 15,569,713 | 0.21 |
| PSI #8 | Postoperative Hip Fracture Rate | 153 | 3,421,646 | 0.04 |
| PSI #9 | Perioperative Hemorrhage or Hematoma Rate | 27,155 | 5,317,074 | 5.11 |
| PSI #10 | Postoperative Physiologic and Metabolic Derangement Rate | 1,829 | 2,655,114 | 0.69 |
| PSI #11 | Postoperative Respiratory Failure Rate | 22,402 | 2,228,418 | 10.05 |
| PSI #12 | Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate | 28,370 | 5,689,423 | 4.99 |
| PSI #13 | Postoperative Sepsis Rate | 4,822 | 501,689 | 9.61 |
| PSI #14 | Postoperative Wound Dehiscence Rate | 1,559 | 836,248 | 1.86 |
| PSI #15 | Accidental Puncture or Laceration Rate | 37,494 | 19,879,692 | 1.89 |
| PSI #16 | Transfusion Reaction Count | 38 | . | . |
| PSI #18 | Obstetric Trauma Rate – Vaginal Delivery With Instrument | 18,246 | 136,989 | 133.19 |
| PSI #19 | Obstetric Trauma Rate – Vaginal Delivery Without Instrument | 39,324 | 1,875,164 | 20.97 |

Table 2. Patient Safety Area-Level Indicators for Overall Population

| INDICATOR | LABEL | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 100,000 (=OBSERVED RATEx100,000) |
|-----------|---|-----------|-------------|---|
| | AREA-LEVEL INDICATORS ** | | | |
| PSI #21 | Retained Surgical Item or Unretrieved Device Fragment Rate | | | |
| PSI #22 | Iatrogenic Pneumothorax Rate | | | |
| PSI #23 | Central Venous Catheter-Related Blood Stream Infection Rate | | | |
| PSI #24 | Postoperative Wound Dehiscence Rate | | | |
| PSI #25 | Accidental Puncture or Laceration Rate | | | |
| PSI #26 | Transfusion Reaction Rate | | | |
| PSI #27 | Perioperative Hemorrhage or Hematoma Rate | | | |

** The AHRQ QI Program discovered that the QI Population Files (v7.0 1995-2017 population file and prior) contained some inaccurate county-level age- sex- and race-specific county population estimates beginning with the 2012 calendar year. The QI population file has been updated and a new version, v2018, is now available at: http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/1995-2017_Population_Files_V2018.zip. Because of the inaccuracies in the population data, the numerator, denominator and observed rates have been removed from the table. For further details, please refer to [http://www.qualityindicators.ahrq.gov//News/AHRQ QIs Population File Issue and Resolution.pdf](http://www.qualityindicators.ahrq.gov//News/AHRQ_QIs_Population_File_Issue_and_Resolution.pdf)

Table 3. PSI #2 - Death Rate in Low-Mortality Diagnosis Related Groups (DRGs)

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 1,822 | 5,636,599 | 0.32 |
| Females | 1,069 | 4,686,099 | 0.23 |
| Males | 753 | 950,500 | 0.79 |
| 0 to 17 years | ***** | 79,051 | ***** |
| 18 to 39 years | 239 - 248 | 3,742,951 | 0.06 - 0.07 |
| 40 to 64 years | 329 | 1,159,902 | 0.28 |
| 65 to 74 years | 223 | 284,354 | 0.78 |
| 75+ years | 1,025 | 370,341 | 2.77 |
| Private | 273 | 2,291,898 | 0.12 |
| Medicare | 1,161 | 914,275 | 1.27 |
| Medicaid | 265 | 1,923,567 | 0.14 |
| Other | 62 | 225,474 | 0.27 |
| Uninsured (self-pay/no charge) | 61 | 281,385 | 0.22 |

Table 4. PSI #3 – Pressure Ulcer Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 2,804 | 5,606,091 | 0.5 |
| Females | 1,217 | 2,966,101 | 0.41 |
| Males | 1,587 | 2,639,990 | 0.6 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 167 | 613,124 | 0.27 |
| 40 to 64 years | 897 | 2,014,888 | 0.45 |
| 65 to 74 years | 621 | 1,107,649 | 0.56 |
| 75+ years | 1,119 | 1,870,430 | 0.6 |
| Private | 409 | 1,125,253 | 0.36 |
| Medicare | 1,824 | 3,329,882 | 0.55 |
| Medicaid | 383 | 676,120 | 0.57 |
| Other | 84 | 184,490 | 0.46 |
| Uninsured (self-pay/no charge) | 104 | 290,346 | 0.36 |

Table 5. PSI #4 – Death Rate among Surgical Inpatients with Serious Treatable Complications

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|---------------|-------------|---|
| Overall | 22,014 | 185,587 | 118.62 |
| Females | 9,484 | 89,815 | 105.59 |
| Males | 12,530 | 95,772 | 130.83 |
| 0 to 17 years | ***** | 65 | ***** |
| 18 to 39 years | 1,004 - 1,013 | 16,173 | 62.08 - 62.64 |
| 40 to 64 years | 7,030 | 68,454 | 102.7 |
| 65 to 74 years | 5,486 | 45,932 | 119.44 |
| 75+ years | 8,491 | 54,963 | 154.49 |
| Private | 4,058 | 46,612 | 87.06 |
| Medicare | 14,239 | 106,084 | 134.22 |
| Medicaid | 2,009 | 18,803 | 106.84 |
| Other | 625 | 6,090 | 102.63 |
| Uninsured (self-pay/no charge) | 1,083 | 7,998 | 135.41 |

Table 6. PSI #4A – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum A

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|---------------|---|
| Overall | 1,258 | 26,659 | 47.19 |
| Females | 572 | 13,781 | 41.51 |
| Males | 686 | 12,878 | 53.27 |
| 0 to 17 years | ***** | ***** | ***** |
| 18 to 39 years | 55 - 64 | 2,343 - 2,352 | 23.47 - 27.21 |
| 40 to 64 years | 443 | 10,581 | 41.87 |
| 65 to 74 years | 338 | 6,931 | 48.77 |
| 75+ years | 421 | 6,791 | 61.99 |
| Private | 278 | 8,312 | 33.45 |
| Medicare | 774 | 14,016 | 55.22 |
| Medicaid | 106 | 2,282 | 46.45 |
| Other | 40 | 1,015 | 39.41 |
| Uninsured (self-pay/no charge) | 60 | 1,034 | 58.03 |

Table 7. PSI #4B – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum B

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 6,151 | 81,902 | 75.1 |
| Females | 2,451 | 38,471 | 63.71 |
| Males | 3,700 | 43,431 | 85.19 |
| 0 to 17 years | ***** | 35 | ***** |
| 18 to 39 years | 249 - 258 | 7,552 | 32.97 - 34.16 |
| 40 to 64 years | 1,776 | 28,485 | 62.35 |
| 65 to 74 years | 1,422 | 19,311 | 73.64 |
| 75+ years | 2,698 | 26,519 | 101.74 |
| Private | 1,090 | 19,653 | 55.46 |
| Medicare | 4,023 | 47,249 | 85.14 |
| Medicaid | 506 | 8,314 | 60.86 |
| Other | 191 | 2,775 | 68.83 |
| Uninsured (self-pay/no charge) | 341 | 3,911 | 87.19 |

Table 8. PSI #4C – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum C

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 5,622 | 28,088 | 200.16 |
| Females | 2,417 | 12,722 | 189.99 |
| Males | 3,205 | 15,366 | 208.58 |
| 0 to 17 years | ***** | 11 | ***** |
| 18 to 39 years | 192 - 201 | 2,350 | 81.70 - 85.53 |
| 40 to 64 years | 1,557 | 10,415 | 149.5 |
| 65 to 74 years | 1,456 | 6,843 | 212.77 |
| 75+ years | 2,415 | 8,469 | 285.16 |
| Private | 962 | 6,476 | 148.55 |
| Medicare | 3,808 | 16,169 | 235.51 |
| Medicaid | 493 | 3,328 | 148.14 |
| Other | 139 | 862 | 161.25 |
| Uninsured (self-pay/no charge) | 220 | 1,253 | 175.58 |

Table 9. PSI #4D – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum D

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 7,706 | 22,388 | 344.2 |
| Females | 3,500 | 11,804 | 296.51 |
| Males | 4,206 | 10,584 | 397.39 |
| 0 to 17 years | ***** | 12 | ***** |
| 18 to 39 years | 457 - 466 | 2,490 | 183.53 - 187.15 |
| 40 to 64 years | 2,786 | 8,614 | 323.43 |
| 65 to 74 years | 1,949 | 5,441 | 358.21 |
| 75+ years | 2,508 | 5,831 | 430.11 |
| Private | 1,518 | 5,573 | 272.38 |
| Medicare | 4,796 | 12,634 | 379.61 |
| Medicaid | 793 | 2,653 | 298.91 |
| Other | 216 | 630 | 342.86 |
| Uninsured (self-pay/no charge) | 383 | 898 | 426.5 |

Table 10. PSI #4E – Death Rate among Surgical Inpatients with Serious Treatable Complications – Stratum E

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|---------------|---|
| Overall | 1,277 | 26,550 | 48.1 |
| Females | 544 | 13,037 | 41.73 |
| Males | 733 | 13,513 | 54.24 |
| 0 to 17 years | ***** | ***** | ***** |
| 18 to 39 years | 33 - 42 | 1,428 - 1,437 | 23.11 - 29.23 |
| 40 to 64 years | 468 | 10,359 | 45.18 |
| 65 to 74 years | 321 | 7,406 | 43.34 |
| 75+ years | 449 | 7,353 | 61.06 |
| Private | 210 | 6,598 | 31.83 |
| Medicare | 838 | 16,016 | 52.32 |
| Medicaid | 111 | 2,226 | 49.87 |
| Other | 39 | 808 | 48.27 |
| Uninsured (self-pay/no charge) | 79 | 902 | 87.58 |

Table 11. PSI #5 – Retained Surgical Item or Unretrieved Device Fragment Count

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 973 | . | . |
| Females | 543 | . | . |
| Males | 430 | . | . |
| 0 to 17 years | ***** | . | . |
| 18 to 39 years | 188 - 197 | . | . |
| 40 to 64 years | 412 | . | . |
| 65 to 74 years | 200 | . | . |
| 75+ years | 167 | . | . |
| Private | 355 | . | . |
| Medicare | 394 | . | . |
| Medicaid | 133 | . | . |
| Other | 45 | . | . |
| Uninsured (self-pay/no charge) | 46 | . | . |

Table 12. PSI #6 – Latrogenic Pneumothorax Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 6,418 | 19,129,500 | 0.34 |
| Females | 3,695 | 10,259,192 | 0.36 |
| Males | 2,723 | 8,870,308 | 0.31 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 552 | 2,611,117 | 0.21 |
| 40 to 64 years | 1,970 | 7,458,084 | 0.26 |
| 65 to 74 years | 1,377 | 3,584,896 | 0.38 |
| 75+ years | 2,519 | 5,475,403 | 0.46 |
| Private | 1,184 | 4,754,304 | 0.25 |
| Medicare | 4,145 | 10,154,984 | 0.41 |
| Medicaid | 687 | 2,261,267 | 0.3 |
| Other | 154 | 724,309 | 0.21 |
| Uninsured (self-pay/no charge) | 248 | 1,234,636 | 0.2 |

Table 13. PSI #7 – Central Venous Catheter-Related Blood Stream Infection Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 3,215 | 15,569,713 | 0.21 |
| Females | 1,526 | 9,813,751 | 0.16 |
| Males | 1,689 | 5,755,962 | 0.29 |
| 0 to 17 years | ***** | 71,017 | ***** |
| 18 to 39 years | 592 - 601 | 4,580,030 | 0.13 - 0.13 |
| 40 to 64 years | 1,406 | 5,020,712 | 0.28 |
| 65 to 74 years | 590 | 2,240,531 | 0.26 |
| 75+ years | 626 | 3,657,423 | 0.17 |
| Private | 650 | 4,530,727 | 0.14 |
| Medicare | 1,638 | 6,612,012 | 0.25 |
| Medicaid | 643 | 2,876,033 | 0.22 |
| Other | 103 | 600,313 | 0.17 |
| Uninsured (self-pay/no charge) | 181 | 950,628 | 0.19 |

Table 14. PSI #8 – Postoperative Hip Fracture Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 153 | 3,421,646 | 0.04 |
| Females | 79 | 1,785,127 | 0.04 |
| Males | 74 | 1,636,519 | 0.05 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | ***** | 498,819 | ***** |
| 40 to 64 years | 34 - 43 | 1,562,010 | 0.02 - 0.03 |
| 65 to 74 years | 34 | 712,352 | 0.05 |
| 75+ years | 81 | 648,465 | 0.12 |
| Private | 16 | 1,252,483 | 0.01 |
| Medicare | 122 | 1,494,515 | 0.08 |
| Medicaid | ***** | 339,417 | ***** |
| Other | ***** | 126,335 | ***** |
| Uninsured (self-pay/no charge) | ***** | 208,896 | ***** |

Table 15. PSI #9 – Perioperative Hemorrhage or Hematoma Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 27,155 | 5,317,074 | 5.11 |
| Females | 13,453 | 2,871,520 | 4.68 |
| Males | 13,702 | 2,445,554 | 5.6 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 2,891 | 663,595 | 4.36 |
| 40 to 64 years | 11,750 | 2,365,649 | 4.97 |
| 65 to 74 years | 6,420 | 1,186,620 | 5.41 |
| 75+ years | 6,094 | 1,101,210 | 5.53 |
| Private | 8,917 | 1,925,451 | 4.63 |
| Medicare | 13,669 | 2,434,735 | 5.61 |
| Medicaid | 2,577 | 448,588 | 5.74 |
| Other | 993 | 242,509 | 4.09 |
| Uninsured (self-pay/no charge) | 999 | 265,791 | 3.76 |

Table 16. PSI #10 – Postoperative Physiologic and Metabolic Derangement Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 1,829 | 2,655,114 | 0.69 |
| Females | 713 | 1,517,865 | 0.47 |
| Males | 1,116 | 1,137,249 | 0.98 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 47 | 243,554 | 0.19 |
| 40 to 64 years | 606 | 1,250,065 | 0.48 |
| 65 to 74 years | 590 | 684,988 | 0.86 |
| 75+ years | 586 | 476,507 | 1.23 |
| Private | 440 | 1,093,949 | 0.4 |
| Medicare | 1,227 | 1,224,732 | 1 |
| Medicaid | 97 | 165,700 | 0.59 |
| Other | 41 | 111,058 | 0.37 |
| Uninsured (self-pay/no charge) | 24 | 59,675 | 0.4 |

Table 17. PSI #11 – Postoperative Respiratory Failure Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 22,402 | 2,228,418 | 10.05 |
| Females | 12,013 | 1,353,280 | 8.88 |
| Males | 10,389 | 875,138 | 11.87 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 1,150 | 227,618 | 5.05 |
| 40 to 64 years | 9,180 | 1,095,360 | 8.38 |
| 65 to 74 years | 6,565 | 550,503 | 11.93 |
| 75+ years | 5,507 | 354,937 | 15.52 |
| Private | 5,988 | 973,335 | 6.15 |
| Medicare | 13,638 | 960,333 | 14.2 |
| Medicaid | 1,640 | 142,918 | 11.48 |
| Other | 738 | 101,245 | 7.29 |
| Uninsured (self-pay/no charge) | 398 | 50,587 | 7.87 |

Table 18. PSI #12 – Perioperative Pulmonary Embolism or Deep Vein Thrombosis Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 28,370 | 5,689,423 | 4.99 |
| Females | 13,936 | 3,033,488 | 4.59 |
| Males | 14,434 | 2,655,935 | 5.43 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 2,126 | 705,407 | 3.01 |
| 40 to 64 years | 10,818 | 2,504,605 | 4.32 |
| 65 to 74 years | 7,327 | 1,271,903 | 5.76 |
| 75+ years | 8,099 | 1,207,508 | 6.71 |
| Private | 7,970 | 2,024,378 | 3.94 |
| Medicare | 15,620 | 2,638,264 | 5.92 |
| Medicaid | 2,609 | 482,286 | 5.41 |
| Other | 1,143 | 257,662 | 4.44 |
| Uninsured (self-pay/no charge) | 1,028 | 286,833 | 3.58 |

Table 19. PSI #13 – Postoperative Sepsis Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 4,822 | 501,689 | 9.61 |
| Females | 2,321 | 275,892 | 8.41 |
| Males | 2,501 | 225,797 | 11.08 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 322 | 38,898 | 8.28 |
| 40 to 64 years | 1,831 | 218,326 | 8.39 |
| 65 to 74 years | 1,320 | 135,156 | 9.77 |
| 75+ years | 1,349 | 109,309 | 12.34 |
| Private | 1,198 | 173,145 | 6.92 |
| Medicare | 2,967 | 259,651 | 11.43 |
| Medicaid | 403 | 36,030 | 11.19 |
| Other | 143 | 20,463 | 6.99 |
| Uninsured (self-pay/no charge) | 111 | 12,400 | 8.95 |

Table 20. PSI #14 – Postoperative Wound Dehiscence Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 1,559 | 836,248 | 1.86 |
| Females | 541 | 511,297 | 1.06 |
| Males | 1,018 | 324,951 | 3.13 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 112 | 121,201 | 0.92 |
| 40 to 64 years | 675 | 413,168 | 1.63 |
| 65 to 74 years | 377 | 159,936 | 2.36 |
| 75+ years | 395 | 141,943 | 2.78 |
| Private | 403 | 353,740 | 1.14 |
| Medicare | 845 | 316,946 | 2.67 |
| Medicaid | 187 | 84,638 | 2.21 |
| Other | 53 | 33,587 | 1.58 |
| Uninsured (self-pay/no charge) | 71 | 47,337 | 1.5 |

Table 21. PSI #15 – Accidental Puncture or Laceration Rate

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 37,494 | 19,879,692 | 1.89 |
| Females | 23,894 | 10,577,178 | 2.26 |
| Males | 13,600 | 9,302,514 | 1.46 |
| 0 to 17 years | . | . | . |
| 18 to 39 years | 3,858 | 2,676,404 | 1.44 |
| 40 to 64 years | 17,023 | 7,662,360 | 2.22 |
| 65 to 74 years | 8,187 | 3,755,500 | 2.18 |
| 75+ years | 8,426 | 5,785,428 | 1.46 |
| Private | 13,435 | 4,894,449 | 2.74 |
| Medicare | 17,639 | 10,629,925 | 1.66 |
| Medicaid | 3,519 | 2,335,732 | 1.51 |
| Other | 1,313 | 729,917 | 1.8 |
| Uninsured (self-pay/no charge) | 1,588 | 1,289,669 | 1.23 |

Table 22. PSI #16 – Transfusion Reaction Count

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 38 | . | . |
| Females | 18 | . | . |
| Males | 20 | . | . |
| 0 to 17 years | . | . | . |
| 18 to 39 years | ***** | . | . |
| 40 to 64 years | 20 | . | . |
| 65 to 74 years | ***** | . | . |
| 75+ years | ***** | . | . |
| Private | 19 | . | . |
| Medicare | 14 | . | . |
| Medicaid | ***** | . | . |
| Other | ***** | . | . |
| Uninsured (self-pay/no charge) | . | . | . |

Table 23. PSI #18 – Obstetric Trauma Rate – Vaginal Delivery With Instrument

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 18,246 | 136,989 | 133.19 |
| Females | 18,246 | 136,989 | 133.19 |
| Males | . | . | . |
| 0 to 17 years | 615 | 5,076 | 121.16 |
| 18 to 39 years | 17,290 | 128,533 | 134.52 |
| 40 to 64 years | 341 | 3,380 | 100.89 |
| 65 to 74 years | . | . | . |
| 75+ years | . | . | . |
| Private | 11,855 | 72,933 | 162.55 |
| Medicare | 82 | 874 | 93.82 |
| Medicaid | 5,323 | 55,415 | 96.06 |
| Other | 603 | 4,434 | 135.99 |
| Uninsured (self-pay/no charge) | 383 | 3,333 | 114.91 |

Table 24. PSI #19 – Obstetric Trauma Rate – Vaginal Delivery Without Instrument

| INDICATOR | NUMERATOR | DENOMINATOR | OBSERVED RATE PER 1,000 (=OBSERVED RATEx1,000) |
|--------------------------------|-----------|-------------|---|
| Overall | 39,324 | 1,875,164 | 20.97 |
| Females | 39,324 | 1,875,164 | 20.97 |
| Males | . | . | . |
| 0 to 17 years | 1,277 | 51,432 | 24.83 |
| 18 to 39 years | 37,424 | 1,780,864 | 21.01 |
| 40 to 64 years | 623 | 42,868 | 14.53 |
| 65 to 74 years | . | . | . |
| 75+ years | . | . | . |
| Private | 25,236 | 895,505 | 28.18 |
| Medicare | 188 | 12,805 | 14.68 |
| Medicaid | 11,817 | 860,143 | 13.74 |
| Other | 1,264 | 60,349 | 20.94 |
| Uninsured (self-pay/no charge) | 819 | 46,362 | 17.67 |

Area-level Indicators

The AHRQ QI Program discovered that the QI Population Files (v7.0 1995-2017 population file and prior) contained some inaccurate county-level age- sex- and race-specific county population estimates beginning with the 2012 calendar year. The QI population file has been updated and a new version, v2018, is now available at:

http://www.qualityindicators.ahrq.gov/Downloads/Software/SAS/V2018/1995-2017_Population_Files_V2018.zip. Because of the inaccuracies in the population data, the observed rates for the area level indicators were not accurate. For further details, please refer to [http://www.qualityindicators.ahrq.gov//News/AHRQ QIs Population File Issue and Resolution.pdf](http://www.qualityindicators.ahrq.gov//News/AHRQ_QIs_Population_File_Issue_and_Resolution.pdf). All tables that relate to Area level indicators have been removed from this document. Please refer to Table 2 above for a list of indicators that were impacted.