

Addendum to October 20, 2016 NPC “How to Interpret Your 2015 Supplemental Quality and Resource Use Report (QRUR)”

November 2016

TABLE OF CONTENTS

| | |
|---|-----------|
| Introduction..... | 2 |
| A. Summary Statistics on the 2015 Reports | 3 |
| 1. Summary of Beneficiary Demographics..... | 3 |
| 2. Cost Breakdown by Episode Type..... | 4 |
| 3. Breakdown of Episode Costs by Service Categories | 8 |
| 4. Percent of Episode Costs Billed by Attributed Medical Group or Solo Practitioner | 21 |
| B. Attribution to Medical Group Practice(s) and Solo Practitioner(s)..... | 24 |
| 5. Summary Statistics on Attribution to TIN(s)..... | 25 |
| C. Cost Distribution of Episode Types..... | 27 |

LIST OF TABLES AND FIGURES

| | |
|---|----|
| Table A-1: Demographics of Beneficiaries With At Least One Episode | 3 |
| Table A-2: Demographics of Beneficiaries, Acute Condition Episodes..... | 3 |
| Table A-3: Demographics of Beneficiaries, Procedural Episodes..... | 4 |
| Table A-4: Average Risk-Adjusted Costs, Acute Condition Episodes..... | 5 |
| Table A-5: Average Risk-Adjusted Costs, Procedural Episodes | 6 |
| Table A-6: Highest Non-Risk-Adjusted Cost Service Categories, Acute Condition Episodes | 9 |
| Table A-7: Highest Non-Risk-Adjusted Cost Service Categories, Procedural Episodes | 14 |
| Table A-8: Average Non-Risk-Adjusted Costs Billed By Attributed TIN, Acute Condition Episodes | 21 |
| Table A-9: Average Non-Risk-Adjusted Costs Billed By Attributed TIN, Procedural Episodes | 22 |
| Table B-1: Summary of Medical Group Practice Attribution Methodology | 24 |
| Table B-2: Summary of IP E&M Visits, Acute Condition Episodes..... | 25 |
| Table B-3: Summary of Attribution Statistics, Acute Condition Episodes..... | 25 |
| Table B-4: Summary of Attribution Statistics, Procedural Episodes..... | 26 |
| Table C-1: Acute Condition Episode Risk-Adjusted Cost Distribution | 27 |
| Table C-2: Procedural Episode Risk-Adjusted Cost Distribution..... | 28 |

INTRODUCTION

This document is an addendum to the October 20th, 2016 National Provider Call (NPC), “How to Interpret Your 2015 Supplemental Quality and Resource Use Report (QRUR).” This addendum provides summary statistics on beneficiary demographics and the episodes included in the reports. For a copy of that presentation and further information on the 2015 Supplemental QRURs, please see [this Centers for Medicare & Medicaid Services \(CMS\) Supplemental QRUR webpage](#).¹ This page includes the following documents:

- Detailed Methods of the 2015 Supplemental QRURs
- Frequently Asked Questions Regarding the 2015 Supplemental QRURs
- Tips to Understand and Use the 2015 Supplemental QRURs
- Episode Definitions files
- Access Guide for the 2015 Supplemental QRURs
- A Sample 2015 Supplemental QRUR

To submit written comments and suggestions regarding the reports, please send an email to PVHelpdesk@cms.hhs.gov.²

This document contains three sections. Addendum A provides summary statistics on the 2015 Supplemental QRURs. Addendum B shows statistics on attribution of episodes to medical group practices and solo practitioners. Finally, Addendum C shows the cost distribution of episode types included in the 2015 Supplemental QRURs.

¹ The webpage URL is <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Episode-Costs-and-Medicare-Episode-Groupers.html>.

² Please do not include any personally identifiable information when providing comments and suggestions.

A. SUMMARY STATISTICS ON THE 2015 REPORTS

Addendum A provides information on:

- Demographics of beneficiaries included in the 2015 Supplemental QRURs;
- Average payment-standardized, risk-adjusted costs by episode type;
- A breakdown of episode costs by service categories for high-cost episodes (90th cost percentile) and all other episodes; and
- The percent of episode costs billed by attributed medical group or solo practitioner.

The following sections provide national summary statistics and discussion on each of these topics in turn.

1. Summary of Beneficiary Demographics

The 2015 Supplemental QRURs provide episode results for medical group practices and solo practitioners to evaluate their performance relative to the national population. In total, 58,677 medical group practices and solo practitioners had at least one episode and received a 2015 Supplemental QRUR

Table A.1 shows the demographics of beneficiaries with at least one episode. The national population includes all Medicare fee for service (FFS) beneficiaries who had a claim in 2015 that triggered one of the episode types reported in the 2015 Supplemental QRURs.

Table A-1: Demographics of Beneficiaries With At Least One Episode

| Type | # of Beneficiaries | Average Age | % Female |
|--------------------------|--------------------|-------------|----------|
| National Benchmark | 5,335,088 | 73.0 | 56.6% |
| Acute Condition Episodes | 1,376,347 | 76.6 | 57.5% |
| Procedural Episodes | 4,179,438 | 71.8 | 55.9% |

Table A.2 presents the demographics of beneficiaries for each major acute condition episode type.

Table A-2: Demographics of Beneficiaries, Acute Condition Episodes

| Major Episode Type | # of Beneficiaries | Average Age | % Female |
|---|--------------------|-------------|----------|
| Acute Myocardial Infarction (AMI) (All) | 89,349 | 76.8 | 47.0% |
| Asthma/Chronic Obstructive Pulmonary Disease (COPD), Acute Exacerbation | 187,839 | 72.8 | 60.9% |
| Atrial Fibrillation(Afib)/Flutter, Acute Exacerbation | 133,503 | 77.5 | 59.6% |
| Cellulitis (All) | 113,573 | 71.5 | 53.9% |
| Gastrointestinal (GI) Hemorrhage (All) | 175,464 | 77.0 | 53.4% |
| Heart Failure, Acute Exacerbation | 278,210 | 78.4 | 54.3% |
| Ischemic Stroke | 140,080 | 78.0 | 57.2% |

| Major Episode Type | # of Beneficiaries | Average Age | % Female |
|--|--------------------|-------------|----------|
| Kidney and Urinary Tract Infection (UTI) | 187,703 | 78.8 | 73.1% |
| Pneumonia, Inpatient (IP)-Based | 209,453 | 77.1 | 55.4% |

Table A.3 presents the demographics of beneficiaries for each major procedural episode type.

Table A-3: Demographics of Beneficiaries, Procedural Episodes

| Major Episode Type | # of Beneficiaries | Average Age | % Female |
|---|--------------------|-------------|----------|
| Aortic Aneurysm Procedure (All) | 24,922 | 74.3 | 27.0% |
| Cholecystectomy and Common Duct Exploration (All) | 127,141 | 69.3 | 58.9% |
| Colonoscopy (All) | 1,991,737 | 69.7 | 54.5% |
| Coronary Artery Bypass Graft (CABG) (All) | 45,578 | 71.1 | 28.1% |
| Hip Replacement or Repair (All) | 139,811 | 72.9 | 61.9% |
| Hip/Femur Fracture/Dislocation Treatment, IP-Based | 76,617 | 81.6 | 72.1% |
| Knee Arthroplasty | 244,442 | 71.6 | 64.0% |
| Knee Joint Repair (All) | 76,841 | 68.1 | 58.3% |
| Lens and Cataract Procedures (All) | 1,333,092 | 74.6 | 60.7% |
| Mastectomy for Breast Cancer (All) | 37,095 | 73.6 | 99.2% |
| Open Heart Valve Surgery (All) | 22,775 | 72.5 | 47.7% |
| Percutaneous Coronary Intervention (PCI) (All) | 202,027 | 72.4 | 36.6% |
| Spinal Fusion (All) | 60,257 | 69.2 | 59.0% |
| Transurethral Resection of the Prostate (TURP) for Benign Prostatic Hyperplasia | 75,606 | 75.0 | 0.0% |

2. Cost Breakdown by Episode Type

The following tables provide a summary of the average payment-standardized, risk-adjusted cost to Medicare for both acute condition and procedural episode types. Medical group practices or solo practitioners are identified by their Medicare-enrolled tax identification number (TIN). The TINs referenced in these tables are restricted to medical group practices and solo practitioners that received a report and had at least 10 episodes of the given episode type. National average risk-adjusted costs are calculated as an arithmetic mean using all episodes nationally. For most acute condition episode types, between 40 and 50% of the TINs with at least 10 episodes have an average risk-adjusted episode cost above the national mean. For most procedural episode type, between 45 and 55% of the TINs with at least 10 episodes have an average risk-adjusted episode cost above the national mean. Addendum C in this document provides further information on episode cost distributions.

Table A.4 presents average risk-adjusted cost, episode count, percent of TINs above the national average cost, and TIN count by episode type for acute condition episodes. Episode

count is taken after attribution and episode exclusions. Episode costs presented are payment-standardized unless otherwise noted. For this and the following tables, the percent of attributed TINs and TIN count calculations were restricted to those TINs that received a report and had at least 10 episodes of the given episode type. An “N/A” means that no included TINs were attributed episodes of that subtype.

Table A-4: Average Risk-Adjusted Costs, Acute Condition Episodes

| Episode Type | Episode Count | National Average Risk-Adjusted Cost | % of Attributed TINs Above National Average | TIN Count |
|--|---------------|-------------------------------------|---|-----------|
| 1. AMI | 89,915 | \$20,894 | 41.9% | 2,247 |
| 2. AMI without PCI/CABG, NSTEMI | 39,923 | \$16,700 | 41.8% | 1,234 |
| 3. AMI with PCI, NSTEMI | 24,704 | \$22,628 | 40.4% | 850 |
| 4. AMI with CABG, NSTEMI | 3,097 | \$54,198 | 37.5% | 32 |
| 5. AMI without PCI/CABG, STEMI | 4,533 | \$14,950 | 56.0% | 25 |
| 6. AMI with PCI, STEMI | 17,117 | \$22,652 | 46.1% | 529 |
| 7. AMI with CABG, STEMI | 541 | \$54,716 | N/A | 0 |
| 8. Asthma/COPD, Acute | 202,238 | \$12,235 | 47.5% | 4,529 |
| 9. Afib/Flutter, Acute | 136,983 | \$11,343 | 46.5% | 3,114 |
| 10. Cellulitis | 125,223 | \$11,556 | 43.9% | 2,831 |
| 11. Cellulitis in Diabetics | 44,818 | \$12,006 | 43.3% | 1,191 |
| 12. Cellulitis in Patients with Wound, Non-Diabetic | 79,767 | \$11,324 | 45.0% | 1,905 |
| 13. Cellulitis in Obese Patients, Non-Diabetic without Wound | 59 | \$10,182 | N/A | 0 |
| 14. Cellulitis in All Other Patients | 579 | \$8,897 | N/A | 0 |
| 15. GI Hemorrhage | 195,151 | \$11,992 | 42.0% | 4,029 |
| 16. GI Hemorrhage, Upper and Lower | 49,065 | \$12,402 | 42.0% | 1,410 |
| 17. GI Hemorrhage, Upper | 68,457 | \$12,415 | 39.2% | 1,863 |
| 18. GI Hemorrhage, Lower | 55,763 | \$11,004 | 41.1% | 1,560 |
| 19. GI Hemorrhage, Undefined | 21,866 | \$12,264 | 42.0% | 540 |
| 20. Heart Failure, Acute | 299,424 | \$16,212 | 46.6% | 5,847 |
| 21. Ischemic Stroke | 141,429 | \$25,124 | 44.4% | 2,860 |
| 22. Kidney and UTI | 204,278 | \$13,305 | 46.7% | 4,081 |
| 23. Pneumonia, IP-Based | 212,989 | \$14,153 | 47.7% | 4,417 |

Table A.5 presents average risk-adjusted cost, episode count, percent of TINs above the national average cost, and TIN count by episode type for procedural episode types.

Table A-5: Average Risk-Adjusted Costs, Procedural Episodes

| Episode Type | Episode Count | National Average Risk-Adjusted Cost | % of Attributed TINs Above National Average | TIN Count |
|---|---------------|-------------------------------------|---|-----------|
| 24. Aortic Aneurysm Procedure | 25,212 | \$37,730 | 42.1% | 719 |
| 25. Abdominal Aortic Aneurysm Procedure | 18,502 | \$30,016 | 42.9% | 599 |
| 26. Thoracic Aortic Aneurysm Procedure | 6,710 | \$59,000 | 49.1% | 167 |
| 27. Open Heart Valve Surgery | 22,799 | \$56,279 | 42.9% | 564 |
| 28. Both Aortic and Mitral Valve Surgery | 2,136 | \$69,360 | 51.1% | 47 |
| 29. Aortic or Mitral Valve Surgery | 20,412 | \$54,782 | 43.1% | 543 |
| 30. Pulmonary or Tricuspid Valve Surgery | 251 | \$66,636 | 100.0% | 1 |
| 31. Cholecystectomy and Common Duct Exploration | 127,212 | \$9,275 | 44.0% | 3,022 |
| 32. Cholecystectomy | 126,999 | \$9,267 | 43.9% | 3,020 |
| 33. Surgical Biliary Tract Procedures | 213 | \$13,940 | N/A | 0 |
| 34. Colonoscopy | 2,019,783 | \$1,377 | 59.3% | 7,431 |
| 35. Colonoscopy with Invasive Procedures | 1,589,154 | \$1,492 | 57.8% | 7,022 |
| 36. Colonoscopy without Invasive Procedures | 430,629 | \$955 | 59.8% | 4,185 |
| 37. CABG | 45,582 | \$47,035 | 47.3% | 901 |
| 38. CABG With AMI | 12,102 | \$56,050 | 43.8% | 432 |
| 39. CABG Without AMI | 33,480 | \$43,777 | 46.6% | 799 |
| 40. Hip/Femur Fracture/Dislocation Treatment, IP-Based | 77,055 | \$40,106 | 48.9% | 1,845 |
| 41. Hip Replacement or Repair | 143,683 | \$23,455 | 55.1% | 2,375 |
| 42. Hip Arthroplasty | 142,963 | \$23,532 | 55.4% | 2,367 |
| 43. Hip Arthroscopy and Hip Joint Repair | 720 | \$8,116 | 62.5% | 8 |
| 44. Knee Arthroplasty | 252,454 | \$20,784 | 56.5% | 3,136 |
| 45. Knee Joint Repair | 77,520 | \$3,540 | 52.3% | 1,812 |
| 46. Meniscus Repair | 77,397 | \$3,530 | 52.3% | 1,809 |
| 47. Knee Ligament Repair | 123 | \$9,991 | N/A | 0 |
| 48. Lens and Cataract Procedures | 1,427,279 | \$2,709 | 48.8% | 5,844 |
| 49. Cataract Surgery | 970,729 | \$3,520 | 46.5% | 5,390 |
| 50. Discission | 447,565 | \$920 | 44.9% | 4,889 |
| 51. Intraocular Lens (IOL) Removal/Repositioning or Secondary IOL Insertion | 8,985 | \$4,290 | 37.6% | 133 |

| Episode Type | Episode Count | National Average Risk-Adjusted Cost | % of Attributed TINs Above National Average | TIN Count |
|---|---------------|-------------------------------------|---|-----------|
| 52. Mastectomy for Breast Cancer | 37,246 | \$9,987 | 44.9% | 947 |
| 53. Lumpectomy or Partial Mastectomy without Reconstruction | 24,498 | \$9,022 | 44.0% | 634 |
| 54. Lumpectomy or Partial Mastectomy with Reconstruction | 478 | \$14,206 | 16.7% | 6 |
| 55. Simple or Modified Radical Mastectomy without Reconstruction | 10,529 | \$11,191 | 44.8% | 181 |
| 56. Simple or Modified Radical Mastectomy with Reconstruction | 1,466 | \$15,685 | 50.0% | 6 |
| 57. Subcutaneous Mastectomy | 275 | \$12,081 | 100.0% | 1 |
| 58. PCI | 207,314 | \$19,096 | 43.6% | 2,287 |
| 59. PCI, IP-Based | 107,545 | \$23,310 | 48.0% | 1,807 |
| 60. PCI, OP-Based | 99,769 | \$14,553 | 43.7% | 1,688 |
| 61. Spinal Fusion | 61,749 | \$39,588 | 44.4% | 1,499 |
| 62. Anterior Fusion - Single | 2,914 | \$38,830 | 31.1% | 61 |
| 63. Anterior Fusion - Two Levels | 1,609 | \$56,817 | 64.0% | 25 |
| 64. Posterior/Posterior-lateral Approach Fusion - Single | 29,465 | \$34,015 | 47.2% | 867 |
| 65. Posterior/Posterior-lateral Approach Fusion - Two or Three Levels | 22,313 | \$41,600 | 42.4% | 682 |
| 66. Combined Spinal Fusion | 5,448 | \$56,799 | 34.7% | 147 |
| 67. TURP for Benign Prostatic Hyperplasia | 76,524 | \$6,134 | 49.7% | 1,545 |

3. Breakdown of Episode Costs by Service Categories

The following tables provide a breakdown of episode costs by service categories both for high-cost episodes (90th cost percentile) and for all other episodes. Table A.6 shows the average non-risk-adjusted cost for each episode type and for service categories within the episode type for acute condition episodes.³ Costs shown are not risk-adjusted because risk adjustment is performed at the episode level, which means that risk-adjusted costs are not calculated for individual service categories. Acute condition episodes in the top decile of the cost distribution tend to have higher cost from post-acute care services, stemming from costs from readmissions, skilled nursing facilities (SNFs), and rehabilitation/long term care hospital (LTCHs). The average acute condition episode has cost driven by the inpatient (IP) trigger event, which is the IP stay that opened the episode. The “IP Hospital: Trigger” category includes all IP costs billed during the trigger IP stay, while the “IP Hospital: Non-Trigger” category includes any IP costs billed during the episode that were not part of the trigger IP stay. The “All Other Costs” category shows costs from service categories not specifically broken out in this table, such as costs from Home Health. Note that only major episode types are listed for the service category cost breakdown. For this and the following tables, costs are broken into decile, where “1st decile” refers to the average costs of episodes in the 1st to 10th percentile of risk-adjusted costs.

³ Service category costs may not sum to the total cost of the episode, as some low-cost service categories are not displayed.

Table A-6: Highest Non-Risk-Adjusted Cost Service Categories, Acute Condition Episodes

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital | All Other Costs |
|------------------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 1. AMI (All) | 10th | \$47,786 | \$12,555 | \$8,417 | \$3,454 | \$14,006 | \$3,773 | \$5,582 |
| | 9th | \$29,990 | \$12,887 | \$3,136 | \$2,478 | \$4,544 | \$872 | \$6,074 |
| | 8th | \$24,607 | \$13,018 | \$2,017 | \$2,224 | \$2,141 | \$369 | \$4,838 |
| | 7th | \$20,764 | \$12,969 | \$977 | \$1,977 | \$825 | \$99 | \$3,918 |
| | 6th | \$18,697 | \$13,090 | \$326 | \$1,861 | \$314 | \$31 | \$3,074 |
| | 5th | \$17,567 | \$13,157 | \$136 | \$1,784 | \$169 | \$11 | \$2,310 |
| | 4th | \$16,482 | \$12,884 | \$50 | \$1,640 | \$107 | \$5 | \$1,798 |
| | 3rd | \$15,356 | \$12,177 | \$32 | \$1,495 | \$97 | \$1 | \$1,553 |
| | 2nd | \$11,820 | \$9,446 | \$19 | \$1,110 | \$88 | \$1 | \$1,156 |
| | 1st | \$7,930 | \$6,544 | \$4 | \$686 | \$30 | \$1 | \$665 |
| 8. Asthma/COPD, Acute Exacerbation | 10th | \$35,622 | \$5,706 | \$6,301 | \$2,215 | \$12,945 | \$3,526 | \$4,929 |
| | 9th | \$19,070 | \$5,618 | \$3,600 | \$1,424 | \$3,813 | \$225 | \$4,390 |
| | 8th | \$13,813 | \$5,570 | \$1,833 | \$1,116 | \$1,319 | \$24 | \$3,950 |
| | 7th | \$10,422 | \$5,509 | \$352 | \$923 | \$404 | \$5 | \$3,229 |
| | 6th | \$8,728 | \$5,534 | \$60 | \$812 | \$157 | \$1 | \$2,165 |
| | 5th | \$7,990 | \$5,573 | \$24 | \$721 | \$87 | \$1 | \$1,583 |
| | 4th | \$7,566 | \$5,589 | \$9 | \$653 | \$52 | \$1 | \$1,263 |
| | 3rd | \$7,238 | \$5,534 | \$7 | \$603 | \$41 | \$0 | \$1,053 |
| | 2nd | \$6,967 | \$5,444 | \$4 | \$561 | \$35 | \$0 | \$923 |
| | 1st | \$6,567 | \$5,205 | \$1 | \$499 | \$43 | \$0 | \$818 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital | All Other Costs |
|-------------------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 9. AFib/Flutter, Acute Exacerbation | 10th | \$34,727 | \$5,406 | \$6,187 | \$2,259 | \$14,148 | \$2,733 | \$3,993 |
| | 9th | \$18,034 | \$5,208 | \$2,548 | \$1,496 | \$4,982 | \$390 | \$3,410 |
| | 8th | \$11,323 | \$4,723 | \$977 | \$1,101 | \$1,360 | \$27 | \$3,134 |
| | 7th | \$8,796 | \$4,609 | \$211 | \$975 | \$361 | \$4 | \$2,636 |
| | 6th | \$7,845 | \$4,704 | \$42 | \$906 | \$144 | \$1 | \$2,048 |
| | 5th | \$7,356 | \$4,846 | \$9 | \$841 | \$69 | \$0 | \$1,589 |
| | 4th | \$7,097 | \$4,981 | \$5 | \$785 | \$43 | \$0 | \$1,281 |
| | 3rd | \$6,886 | \$5,071 | \$2 | \$737 | \$37 | \$0 | \$1,039 |
| | 2nd | \$6,604 | \$5,051 | \$0 | \$677 | \$22 | \$0 | \$855 |
| | 1st | \$5,980 | \$4,707 | \$0 | \$571 | \$16 | \$0 | \$686 |
| 10. Cellulitis (All) | 10th | \$38,073 | \$6,001 | \$4,790 | \$1,478 | \$22,036 | \$2,737 | \$1,032 |
| | 9th | \$19,218 | \$5,810 | \$3,132 | \$1,301 | \$7,701 | \$180 | \$1,095 |
| | 8th | \$12,122 | \$5,644 | \$1,617 | \$1,288 | \$2,332 | \$15 | \$1,226 |
| | 7th | \$8,068 | \$5,518 | \$197 | \$1,102 | \$369 | \$3 | \$880 |
| | 6th | \$7,176 | \$5,478 | \$41 | \$907 | \$120 | \$1 | \$629 |
| | 5th | \$6,902 | \$5,477 | \$13 | \$814 | \$81 | \$1 | \$516 |
| | 4th | \$6,739 | \$5,482 | \$13 | \$752 | \$59 | \$0 | \$433 |
| | 3rd | \$6,538 | \$5,396 | \$8 | \$692 | \$38 | \$0 | \$404 |
| | 2nd | \$6,285 | \$5,275 | \$2 | \$628 | \$31 | \$0 | \$349 |
| | 1st | \$5,825 | \$4,895 | \$1 | \$539 | \$28 | \$0 | \$362 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital | All Other Costs |
|---------------------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 15. GI Hemorrhage (All) | 10th | \$33,881 | \$8,173 | \$5,332 | \$2,076 | \$16,872 | \$234 | \$1,194 |
| | 9th | \$17,966 | \$7,448 | \$3,442 | \$1,799 | \$4,032 | \$5 | \$1,240 |
| | 8th | \$10,753 | \$6,444 | \$624 | \$1,708 | \$856 | \$2 | \$1,119 |
| | 7th | \$8,900 | \$6,380 | \$66 | \$1,435 | \$150 | \$0 | \$868 |
| | 6th | \$8,734 | \$6,634 | \$25 | \$1,280 | \$80 | \$0 | \$714 |
| | 5th | \$8,626 | \$6,774 | \$12 | \$1,167 | \$47 | \$0 | \$626 |
| | 4th | \$8,582 | \$6,894 | \$9 | \$1,077 | \$37 | \$0 | \$565 |
| | 3rd | \$8,341 | \$6,816 | \$7 | \$982 | \$30 | \$0 | \$507 |
| | 2nd | \$8,020 | \$6,622 | \$5 | \$889 | \$32 | \$0 | \$472 |
| | 1st | \$7,457 | \$6,101 | \$5 | \$768 | \$26 | \$0 | \$556 |
| 20. Heart Failure, Acute Exacerbation | 10th | \$45,989 | \$7,256 | \$8,033 | \$3,118 | \$17,560 | \$5,055 | \$4,967 |
| | 9th | \$26,895 | \$6,929 | \$3,933 | \$2,052 | \$8,185 | \$1,022 | \$4,774 |
| | 8th | \$20,245 | \$6,925 | \$3,179 | \$1,742 | \$4,053 | \$166 | \$4,181 |
| | 7th | \$15,393 | \$6,796 | \$1,431 | \$1,493 | \$1,676 | \$36 | \$3,960 |
| | 6th | \$12,337 | \$6,945 | \$223 | \$1,328 | \$496 | \$10 | \$3,335 |
| | 5th | \$10,715 | \$7,015 | \$36 | \$1,161 | \$178 | \$2 | \$2,322 |
| | 4th | \$9,593 | \$6,938 | \$9 | \$993 | \$90 | \$1 | \$1,562 |
| | 3rd | \$8,720 | \$6,667 | \$3 | \$858 | \$45 | \$0 | \$1,147 |
| | 2nd | \$7,880 | \$6,198 | \$1 | \$729 | \$32 | \$0 | \$921 |
| | 1st | \$6,705 | \$5,360 | \$1 | \$564 | \$22 | \$0 | \$758 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital | All Other Costs |
|---------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 21. Ischemic Stroke | 10th | \$68,388 | \$7,623 | \$3,904 | \$3,133 | \$29,163 | \$19,876 | \$4,690 |
| | 9th | \$46,584 | \$7,496 | \$1,889 | \$2,347 | \$16,135 | \$13,806 | \$4,910 |
| | 8th | \$35,662 | \$7,441 | \$1,411 | \$2,024 | \$9,818 | \$10,328 | \$4,640 |
| | 7th | \$28,026 | \$7,517 | \$1,245 | \$1,799 | \$6,954 | \$6,227 | \$4,285 |
| | 6th | \$21,071 | \$7,507 | \$1,026 | \$1,583 | \$4,363 | \$2,150 | \$4,443 |
| | 5th | \$15,329 | \$7,835 | \$382 | \$1,433 | \$1,244 | \$209 | \$4,227 |
| | 4th | \$12,610 | \$8,094 | \$64 | \$1,298 | \$302 | \$35 | \$2,817 |
| | 3rd | \$10,472 | \$7,476 | \$10 | \$1,055 | \$112 | \$13 | \$1,806 |
| | 2nd | \$8,032 | \$5,872 | \$3 | \$854 | \$48 | \$5 | \$1,249 |
| | 1st | \$7,074 | \$5,624 | \$0 | \$720 | \$13 | \$1 | \$716 |
| 22. Kidney and UTI | 10th | \$43,207 | \$5,413 | \$3,948 | \$1,130 | \$30,666 | \$1,091 | \$960 |
| | 9th | \$24,544 | \$5,297 | \$2,606 | \$1,052 | \$14,399 | \$142 | \$1,047 |
| | 8th | \$16,855 | \$5,289 | \$2,491 | \$993 | \$6,916 | \$19 | \$1,147 |
| | 7th | \$11,130 | \$5,165 | \$1,203 | \$1,017 | \$2,171 | \$3 | \$1,571 |
| | 6th | \$7,727 | \$5,126 | \$121 | \$966 | \$393 | \$1 | \$1,120 |
| | 5th | \$6,822 | \$5,157 | \$17 | \$832 | \$124 | \$0 | \$691 |
| | 4th | \$6,539 | \$5,187 | \$6 | \$721 | \$54 | \$0 | \$572 |
| | 3rd | \$6,238 | \$5,106 | \$2 | \$600 | \$26 | \$0 | \$505 |
| | 2nd | \$5,855 | \$4,924 | \$1 | \$501 | \$16 | \$0 | \$413 |
| | 1st | \$5,255 | \$4,411 | \$1 | \$406 | \$11 | \$0 | \$426 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital | All Other Costs |
|-------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|-------------------------------------|-----------------|
| 23. Pneumonia, IP-Based | 10th | \$42,047 | \$7,083 | \$5,080 | \$2,319 | \$19,325 | \$5,063 | \$3,177 |
| | 9th | \$23,669 | \$6,891 | \$2,502 | \$1,575 | \$8,994 | \$777 | \$2,930 |
| | 8th | \$16,163 | \$6,686 | \$1,216 | \$1,326 | \$3,624 | \$72 | \$3,240 |
| | 7th | \$11,620 | \$6,606 | \$220 | \$1,174 | \$881 | \$13 | \$2,726 |
| | 6th | \$9,915 | \$6,681 | \$41 | \$1,017 | \$307 | \$3 | \$1,866 |
| | 5th | \$9,059 | \$6,672 | \$15 | \$867 | \$169 | \$3 | \$1,333 |
| | 4th | \$8,582 | \$6,641 | \$9 | \$772 | \$113 | \$1 | \$1,045 |
| | 3rd | \$8,201 | \$6,502 | \$4 | \$720 | \$98 | \$0 | \$877 |
| | 2nd | \$7,721 | \$6,254 | \$2 | \$640 | \$79 | \$0 | \$745 |
| | 1st | \$6,814 | \$5,563 | \$1 | \$523 | \$75 | \$0 | \$652 |

Table A.7 shows the average non-risk-adjusted cost for each episode type and for service categories within the episode type for procedural episode types, broken out by decile as in Table A.6. The “IP Hospital: Trigger” category includes all IP costs billed during the trigger IP stay, while the “IP Hospital: Non-Trigger” category includes any IP costs billed during the episode that were not part of the trigger IP stay. The “All Other Costs” category shows costs from service categories not specifically broken out in this table, such as costs from Home Health. Procedural episodes in the top decile of cost (i.e., the 10th decile) tend to have either higher cost from the IP trigger event or post-acute care services, with costs largely stemming from readmissions, SNFs, and LTCHs.

Table A-7: Highest Non-Risk-Adjusted Cost Service Categories, Procedural Episodes

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|-------------------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|---------|------------------|----------------|----------------------------|-----------------|
| 24. Aortic Aneurysm Procedure (All) | 10th | \$77,828 | \$48,944 | \$3,999 | \$6,338 | \$7,446 | \$6,271 | \$917 | \$27 | \$3,886 |
| | 9th | \$48,912 | \$33,935 | \$700 | \$4,713 | \$3,373 | \$2,140 | \$886 | \$25 | \$3,139 |
| | 8th | \$38,727 | \$28,283 | \$372 | \$4,152 | \$1,566 | \$1,110 | \$286 | \$30 | \$2,928 |
| | 7th | \$30,789 | \$24,010 | \$137 | \$3,327 | \$652 | \$436 | \$119 | \$19 | \$2,090 |
| | 6th | \$28,393 | \$22,983 | \$61 | \$3,015 | \$372 | \$223 | \$112 | \$12 | \$1,615 |
| | 5th | \$28,007 | \$22,855 | \$46 | \$2,972 | \$357 | \$111 | \$91 | \$7 | \$1,568 |
| | 4th | \$28,791 | \$23,512 | \$74 | \$3,086 | \$342 | \$65 | \$92 | \$10 | \$1,612 |
| | 3rd | \$32,054 | \$25,894 | \$50 | \$3,572 | \$325 | \$96 | \$88 | \$14 | \$2,015 |
| | 2nd | \$35,513 | \$29,025 | \$69 | \$3,948 | \$287 | \$27 | \$86 | \$11 | \$2,060 |
| | 1st | \$30,381 | \$24,614 | \$29 | \$3,197 | \$101 | \$10 | \$540 | \$19 | \$1,871 |
| 27. Open Heart Valve Surgery (All) | 10th | \$105,037 | \$60,124 | \$8,320 | \$10,361 | \$8,565 | \$11,575 | \$74 | \$139 | \$5,880 |
| | 9th | \$68,566 | \$42,229 | \$2,398 | \$7,030 | \$5,629 | \$5,312 | \$74 | \$109 | \$5,785 |
| | 8th | \$57,060 | \$37,643 | \$1,423 | \$6,029 | \$3,549 | \$2,688 | \$66 | \$100 | \$5,561 |
| | 7th | \$50,172 | \$35,371 | \$728 | \$5,322 | \$2,332 | \$1,259 | \$53 | \$82 | \$5,025 |
| | 6th | \$47,651 | \$34,997 | \$475 | \$4,945 | \$1,566 | \$756 | \$49 | \$74 | \$4,789 |
| | 5th | \$47,432 | \$35,829 | \$420 | \$4,878 | \$1,162 | \$470 | \$55 | \$68 | \$4,551 |
| | 4th | \$47,249 | \$36,473 | \$316 | \$4,903 | \$860 | \$298 | \$63 | \$51 | \$4,287 |
| | 3rd | \$47,892 | \$37,418 | \$287 | \$4,966 | \$792 | \$160 | \$43 | \$60 | \$4,165 |
| | 2nd | \$48,037 | \$37,956 | \$212 | \$5,020 | \$562 | \$88 | \$42 | \$62 | \$4,096 |
| | 1st | \$47,425 | \$37,902 | \$87 | \$4,989 | \$341 | \$76 | \$34 | \$63 | \$3,932 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/Minor Proc. | All Other Costs |
|---|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|---------|------------------|----------------|---------------------------|-----------------|
| 31. Cholecystectomy and Common Duct Exploration (All) | 10th | \$19,349 | \$5,020 | \$3,011 | \$1,194 | \$5,015 | \$257 | \$188 | \$2,974 | \$1,691 |
| | 9th | \$9,693 | \$3,032 | \$274 | \$691 | \$802 | \$2 | \$233 | \$3,515 | \$1,143 |
| | 8th | \$7,207 | \$2,146 | \$41 | \$528 | \$152 | \$0 | \$36 | \$3,561 | \$741 |
| | 7th | \$6,523 | \$1,814 | \$7 | \$426 | \$61 | \$0 | \$11 | \$3,614 | \$590 |
| | 6th | \$6,909 | \$2,434 | \$5 | \$540 | \$30 | \$0 | \$13 | \$3,305 | \$581 |
| | 5th | \$7,950 | \$3,874 | \$5 | \$766 | \$35 | \$0 | \$10 | \$2,659 | \$600 |
| | 4th | \$9,463 | \$5,876 | \$9 | \$1,027 | \$54 | \$3 | \$12 | \$1,859 | \$623 |
| | 3rd | \$10,667 | \$7,447 | \$7 | \$1,147 | \$31 | \$0 | \$12 | \$1,417 | \$606 |
| | 2nd | \$11,236 | \$8,252 | \$9 | \$1,078 | \$41 | \$0 | \$18 | \$1,267 | \$572 |
| | 1st | \$4,347 | \$1,396 | \$5 | \$223 | \$24 | \$0 | \$42 | \$2,085 | \$571 |
| 34. Colonoscopy (All) | 10th | \$2,720 | \$0 | \$146 | \$86 | \$12 | \$3 | \$26 | \$1,538 | \$909 |
| | 9th | \$1,788 | \$6 | \$1 | \$9 | \$8 | \$0 | \$1 | \$1,252 | \$511 |
| | 8th | \$1,615 | \$58 | \$2 | \$29 | \$53 | \$0 | \$1 | \$1,018 | \$453 |
| | 7th | \$1,967 | \$437 | \$5 | \$112 | \$120 | \$0 | \$0 | \$869 | \$423 |
| | 6th | \$1,424 | \$177 | \$1 | \$40 | \$22 | \$0 | \$0 | \$836 | \$347 |
| | 5th | \$1,196 | \$51 | \$0 | \$10 | \$0 | \$0 | \$0 | \$855 | \$280 |
| | 4th | \$1,015 | \$8 | \$0 | \$2 | \$0 | \$0 | \$0 | \$711 | \$294 |
| | 3rd | \$972 | \$1 | \$0 | \$1 | \$0 | \$0 | \$0 | \$698 | \$273 |
| | 2nd | \$851 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$607 | \$243 |
| | 1st | \$692 | \$6 | \$0 | \$2 | \$2 | \$0 | \$0 | \$510 | \$172 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|---|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|------------------|----------------|----------------------------|-----------------|
| 37. CABG (All) | 10th | \$86,229 | \$42,098 | \$7,917 | \$8,605 | \$9,026 | \$11,860 | \$177 | \$105 | \$6,440 |
| | 9th | \$59,017 | \$32,590 | \$2,938 | \$6,117 | \$5,298 | \$5,531 | \$189 | \$70 | \$6,284 |
| | 8th | \$49,383 | \$30,084 | \$1,868 | \$5,346 | \$3,238 | \$2,438 | \$147 | \$64 | \$6,199 |
| | 7th | \$43,553 | \$28,411 | \$1,179 | \$4,788 | \$2,017 | \$1,190 | \$152 | \$56 | \$5,760 |
| | 6th | \$41,024 | \$28,135 | \$821 | \$4,603 | \$1,417 | \$600 | \$147 | \$48 | \$5,255 |
| | 5th | \$39,893 | \$28,332 | \$644 | \$4,517 | \$936 | \$314 | \$153 | \$47 | \$4,950 |
| | 4th | \$39,253 | \$28,525 | \$496 | \$4,438 | \$739 | \$172 | \$186 | \$40 | \$4,655 |
| | 3rd | \$39,047 | \$28,947 | \$479 | \$4,414 | \$523 | \$152 | \$185 | \$38 | \$4,309 |
| | 2nd | \$39,005 | \$29,415 | \$410 | \$4,377 | \$466 | \$83 | \$209 | \$34 | \$4,012 |
| | 1st | \$36,846 | \$27,615 | \$237 | \$4,215 | \$418 | \$56 | \$164 | \$35 | \$4,107 |
| 40. Hip/Femur Fracture or Dislocation Treatment, IP-Based | 10th | \$75,805 | \$13,908 | \$6,425 | \$3,875 | \$38,826 | \$8,321 | \$108 | \$134 | \$4,209 |
| | 9th | \$57,489 | \$13,478 | \$2,097 | \$2,910 | \$30,349 | \$4,591 | \$60 | \$111 | \$3,894 |
| | 8th | \$49,026 | \$13,356 | \$1,190 | \$2,819 | \$21,499 | \$5,755 | \$45 | \$90 | \$4,271 |
| | 7th | \$43,883 | \$13,151 | \$682 | \$2,768 | \$15,448 | \$7,311 | \$32 | \$79 | \$4,413 |
| | 6th | \$39,935 | \$13,034 | \$605 | \$2,614 | \$13,394 | \$6,148 | \$34 | \$66 | \$4,040 |
| | 5th | \$36,063 | \$13,020 | \$533 | \$2,467 | \$12,614 | \$3,501 | \$30 | \$55 | \$3,842 |
| | 4th | \$32,352 | \$13,047 | \$448 | \$2,343 | \$10,945 | \$1,770 | \$31 | \$58 | \$3,710 |
| | 3rd | \$28,262 | \$12,956 | \$355 | \$2,264 | \$8,521 | \$533 | \$30 | \$52 | \$3,550 |
| | 2nd | \$23,054 | \$13,309 | \$112 | \$2,283 | \$3,543 | \$101 | \$34 | \$44 | \$3,629 |
| | 1st | \$17,753 | \$12,551 | \$7 | \$2,013 | \$675 | \$32 | \$35 | \$22 | \$2,419 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|-------------------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|----------|------------------|----------------|----------------------------|-----------------|
| 41. Hip Replacement or Repair (All) | 10th | \$48,417 | \$13,782 | \$4,616 | \$2,636 | \$18,519 | \$5,626 | \$94 | \$100 | \$3,044 |
| | 9th | \$33,178 | \$13,579 | \$630 | \$2,202 | \$10,337 | \$3,260 | \$42 | \$79 | \$3,048 |
| | 8th | \$26,669 | \$13,096 | \$284 | \$2,025 | \$6,536 | \$1,387 | \$57 | \$60 | \$3,224 |
| | 7th | \$21,821 | \$12,847 | \$111 | \$1,906 | \$2,938 | \$369 | \$36 | \$52 | \$3,561 |
| | 6th | \$20,240 | \$12,823 | \$66 | \$1,868 | \$1,855 | \$170 | \$37 | \$26 | \$3,395 |
| | 5th | \$18,968 | \$12,798 | \$46 | \$1,860 | \$1,196 | \$81 | \$43 | \$35 | \$2,908 |
| | 4th | \$17,480 | \$12,689 | \$23 | \$1,816 | \$700 | \$36 | \$31 | \$20 | \$2,164 |
| | 3rd | \$17,018 | \$12,579 | \$17 | \$1,814 | \$461 | \$22 | \$28 | \$24 | \$2,074 |
| | 2nd | \$16,580 | \$12,450 | \$10 | \$1,818 | \$314 | \$10 | \$34 | \$19 | \$1,924 |
| | 1st | \$15,469 | \$11,587 | \$6 | \$1,788 | \$216 | \$5 | \$81 | \$41 | \$1,745 |
| 44. Knee Arthroplasty | 10th | \$36,855 | \$12,509 | \$1,308 | \$1,992 | \$12,639 | \$4,391 | \$864 | \$46 | \$3,107 |
| | 9th | \$27,073 | \$12,093 | \$333 | \$1,814 | \$7,142 | \$1,924 | \$1,006 | \$30 | \$2,731 |
| | 8th | \$23,521 | \$12,360 | \$203 | \$1,822 | \$4,409 | \$812 | \$641 | \$33 | \$3,239 |
| | 7th | \$20,746 | \$12,454 | \$77 | \$1,816 | \$1,989 | \$237 | \$317 | \$24 | \$3,831 |
| | 6th | \$19,393 | \$12,482 | \$34 | \$1,799 | \$1,104 | \$61 | \$208 | \$24 | \$3,682 |
| | 5th | \$18,342 | \$12,582 | \$19 | \$1,802 | \$646 | \$24 | \$136 | \$22 | \$3,110 |
| | 4th | \$17,252 | \$12,621 | \$8 | \$1,785 | \$315 | \$10 | \$97 | \$18 | \$2,397 |
| | 3rd | \$16,449 | \$12,585 | \$4 | \$1,764 | \$181 | \$7 | \$71 | \$14 | \$1,825 |
| | 2nd | \$15,979 | \$12,430 | \$3 | \$1,746 | \$107 | \$3 | \$68 | \$14 | \$1,608 |
| | 1st | \$13,355 | \$9,915 | \$4 | \$1,483 | \$68 | \$3 | \$290 | \$30 | \$1,562 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|--|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|-------|------------------|----------------|----------------------------|-----------------|
| 45. Knee Joint Repair (All) | 10th | \$7,063 | \$8 | \$191 | \$136 | \$102 | \$433 | \$203 | \$3,491 | \$2,497 |
| | 9th | \$4,551 | \$3 | \$0 | \$19 | \$11 | \$0 | \$29 | \$2,917 | \$1,573 |
| | 8th | \$4,003 | \$1 | \$1 | \$5 | \$7 | \$0 | \$14 | \$2,707 | \$1,267 |
| | 7th | \$3,695 | \$52 | \$3 | \$10 | \$17 | \$8 | \$10 | \$2,547 | \$1,047 |
| | 6th | \$3,370 | \$24 | \$0 | \$4 | \$12 | \$5 | \$4 | \$2,533 | \$788 |
| | 5th | \$3,274 | \$76 | \$1 | \$11 | \$40 | \$5 | \$7 | \$2,493 | \$641 |
| | 4th | \$3,047 | \$24 | \$0 | \$4 | \$14 | \$0 | \$8 | \$2,386 | \$611 |
| | 3rd | \$2,731 | \$1 | \$0 | \$1 | \$2 | \$0 | \$12 | \$1,989 | \$726 |
| | 2nd | \$2,325 | \$0 | \$0 | \$1 | \$1 | \$0 | \$7 | \$1,768 | \$548 |
| | 1st | \$2,000 | \$1 | \$0 | \$1 | \$1 | \$0 | \$17 | \$1,650 | \$331 |
| 48. Lens and Cataract Procedures (All) | 10th | \$4,514 | \$0 | \$0 | \$1 | \$1 | \$0 | \$18 | \$3,411 | \$1,084 |
| | 9th | \$4,597 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2 | \$4,005 | \$590 |
| | 8th | \$2,678 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1 | \$2,275 | \$401 |
| | 7th | \$2,755 | \$0 | \$0 | \$0 | \$1 | \$0 | \$1 | \$2,275 | \$479 |
| | 6th | \$3,320 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,739 | \$581 |
| | 5th | \$3,235 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,742 | \$492 |
| | 4th | \$2,395 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,026 | \$369 |
| | 3rd | \$1,880 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,557 | \$322 |
| | 2nd | \$1,343 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$1,135 | \$207 |
| | 1st | \$535 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$416 | \$119 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|----------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|---------|------------------|----------------|----------------------------|-----------------|
| 52. Mastectomy (All) | 10th | \$20,344 | \$592 | \$2,222 | \$441 | \$1,312 | \$403 | \$8,024 | \$1,085 | \$6,264 |
| | 9th | \$14,098 | \$445 | \$366 | \$142 | \$187 | \$0 | \$6,045 | \$1,187 | \$5,726 |
| | 8th | \$12,083 | \$452 | \$142 | \$139 | \$40 | \$10 | \$5,155 | \$986 | \$5,159 |
| | 7th | \$11,084 | \$809 | \$50 | \$186 | \$27 | \$33 | \$4,648 | \$762 | \$4,569 |
| | 6th | \$9,884 | \$837 | \$35 | \$196 | \$28 | \$0 | \$4,325 | \$651 | \$3,814 |
| | 5th | \$8,760 | \$876 | \$13 | \$208 | \$6 | \$0 | \$4,114 | \$541 | \$3,001 |
| | 4th | \$7,808 | \$810 | \$6 | \$185 | \$5 | \$0 | \$3,833 | \$463 | \$2,506 |
| | 3rd | \$7,112 | \$804 | \$0 | \$180 | \$1 | \$0 | \$3,579 | \$417 | \$2,131 |
| | 2nd | \$6,008 | \$506 | \$1 | \$102 | \$0 | \$0 | \$3,239 | \$412 | \$1,748 |
| | 1st | \$3,989 | \$38 | \$0 | \$8 | \$0 | \$0 | \$2,413 | \$313 | \$1,217 |
| 58. PCI (All) | 10th | \$42,670 | \$9,437 | \$9,942 | \$2,777 | \$3,873 | \$1,999 | \$9,368 | \$93 | \$5,181 |
| | 9th | \$24,762 | \$7,191 | \$2,020 | \$1,284 | \$980 | \$286 | \$8,528 | \$72 | \$4,401 |
| | 8th | \$20,507 | \$6,442 | \$996 | \$1,002 | \$483 | \$58 | \$7,341 | \$69 | \$4,117 |
| | 7th | \$17,662 | \$6,501 | \$442 | \$908 | \$188 | \$5 | \$5,771 | \$60 | \$3,788 |
| | 6th | \$15,727 | \$6,258 | \$141 | \$831 | \$73 | \$2 | \$5,423 | \$43 | \$2,955 |
| | 5th | \$14,877 | \$6,437 | \$58 | \$834 | \$41 | \$2 | \$5,190 | \$32 | \$2,283 |
| | 4th | \$14,391 | \$6,893 | \$29 | \$856 | \$18 | \$1 | \$4,832 | \$24 | \$1,739 |
| | 3rd | \$14,592 | \$8,385 | \$16 | \$987 | \$17 | \$0 | \$3,742 | \$19 | \$1,426 |
| | 2nd | \$15,355 | \$9,908 | \$13 | \$1,087 | \$12 | \$0 | \$3,032 | \$18 | \$1,284 |
| | 1st | \$12,523 | \$7,024 | \$22 | \$718 | \$9 | \$0 | \$3,382 | \$21 | \$1,348 |

| Major Episode Type | Decile | Average Non-Risk-Adjusted Cost | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/ Minor Proc. | All Other Costs |
|-------------------------|--------|--------------------------------|----------------------|--------------------------|---------------------------------------|---------|------------------|----------------|----------------------------|-----------------|
| 61. Spinal Fusion (All) | 10th | \$71,243 | \$30,586 | \$7,999 | \$6,536 | \$9,494 | \$11,153 | \$514 | \$77 | \$4,884 |
| | 9th | \$52,159 | \$28,075 | \$1,601 | \$5,783 | \$5,351 | \$6,639 | \$232 | \$38 | \$4,441 |
| | 8th | \$44,594 | \$27,353 | \$837 | \$5,463 | \$3,854 | \$2,466 | \$253 | \$31 | \$4,337 |
| | 7th | \$37,828 | \$26,026 | \$341 | \$5,074 | \$1,699 | \$607 | \$169 | \$26 | \$3,887 |
| | 6th | \$34,388 | \$25,216 | \$147 | \$4,774 | \$842 | \$231 | \$135 | \$16 | \$3,025 |
| | 5th | \$33,103 | \$25,220 | \$94 | \$4,488 | \$483 | \$100 | \$142 | \$15 | \$2,562 |
| | 4th | \$33,401 | \$25,908 | \$66 | \$4,491 | \$335 | \$86 | \$138 | \$14 | \$2,364 |
| | 3rd | \$33,296 | \$26,184 | \$42 | \$4,484 | \$257 | \$48 | \$142 | \$11 | \$2,128 |
| | 2nd | \$32,211 | \$25,523 | \$29 | \$4,413 | \$177 | \$24 | \$156 | \$13 | \$1,875 |
| | 1st | \$25,488 | \$19,155 | \$39 | \$3,335 | \$124 | \$27 | \$937 | \$20 | \$1,851 |
| 67. TURP | 10th | \$14,972 | \$889 | \$3,839 | \$502 | \$2,208 | \$95 | \$3,448 | \$1,588 | \$2,402 |
| | 9th | \$7,759 | \$548 | \$349 | \$229 | \$200 | \$0 | \$3,436 | \$1,155 | \$1,841 |
| | 8th | \$6,715 | \$596 | \$147 | \$212 | \$181 | \$19 | \$3,455 | \$809 | \$1,295 |
| | 7th | \$5,706 | \$425 | \$37 | \$139 | \$10 | \$0 | \$3,522 | \$558 | \$1,015 |
| | 6th | \$5,306 | \$472 | \$10 | \$127 | \$5 | \$0 | \$3,509 | \$376 | \$808 |
| | 5th | \$5,255 | \$710 | \$10 | \$166 | \$5 | \$0 | \$3,364 | \$293 | \$708 |
| | 4th | \$5,197 | \$892 | \$1 | \$180 | \$2 | \$0 | \$3,169 | \$284 | \$669 |
| | 3rd | \$5,415 | \$1,460 | \$2 | \$242 | \$3 | \$0 | \$2,691 | \$323 | \$694 |
| | 2nd | \$4,035 | \$592 | \$1 | \$93 | \$1 | \$0 | \$2,312 | \$387 | \$649 |
| | 1st | \$2,319 | \$1 | \$0 | \$22 | \$1 | \$0 | \$1,643 | \$217 | \$436 |

4. Percent of Episode Costs Billed by Attributed Medical Group or Solo Practitioner

The following tables provide a summary of non-risk-adjusted episode costs billed by the attributed TIN and other TINs billing during the episode. For tables in this section, all attributed episodes are included. The term “Inside” refers to average costs billed by the attributed TIN. Note that the table only lists major episode types and does not display all service categories.

For acute condition episode types, the attributed TIN tends to bill roughly 80% of costs. Most of this cost comes from the trigger IP event. Opportunities for care coordination can be identified for some acute condition episode types where the outside TINs bill higher post-acute care costs than the attributed TIN. Table A.8 shows a cost breakdown by major service categories for costs billed inside and outside of the TIN for acute condition episode types.

Table A-8: Average Non-Risk-Adjusted Costs Billed By Attributed TIN, Acute Condition Episodes

| Major Episode Type | | % of All Costs | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or Long Term Care Hospital |
|---------------------------------------|---------|----------------|----------------------|--------------------------|---------------------------------------|---------|-------------------------------------|
| 1. AMI (All) | Inside | 80.8% | \$11,758 | \$1,101 | \$1,104 | \$1,083 | \$330 |
| | Outside | 19.2% | \$0 | \$434 | \$741 | \$1,144 | \$152 |
| 8. Asthma/COPD, Acute Exacerbation | Inside | 78.0% | \$5,554 | \$873 | \$637 | \$1,008 | \$306 |
| | Outside | 22.0% | \$0 | \$350 | \$389 | \$884 | \$93 |
| 9. AFib/Flutter, Acute Exacerbation | Inside | 77.0% | \$4,927 | \$716 | \$645 | \$1,051 | \$227 |
| | Outside | 23.0% | \$0 | \$293 | \$419 | \$1,050 | \$90 |
| 10. Cellulitis (All) | Inside | 81.8% | \$5,499 | \$307 | \$628 | \$1,345 | \$205 |
| | Outside | 18.2% | \$0 | \$685 | \$363 | \$1,919 | \$107 |
| 15. GI Hemorrhage (All) | Inside | 82.6% | \$6,714 | \$417 | \$753 | \$818 | \$11 |
| | Outside | 17.4% | \$0 | \$529 | \$517 | \$1,323 | \$11 |
| 20. Heart Failure, Acute Exacerbation | Inside | 75.8% | \$6,680 | \$1,179 | \$810 | \$1,671 | \$455 |
| | Outside | 24.2% | \$0 | \$515 | \$608 | \$1,507 | \$149 |
| 21. Ischemic Stroke | Inside | 70.7% | \$7,160 | \$611 | \$872 | \$2,521 | \$4,098 |
| | Outside | 29.3% | \$0 | \$374 | \$733 | \$4,159 | \$1,073 |
| 22. Kidney and UTI | Inside | 76.9% | \$5,112 | \$307 | \$575 | \$2,214 | \$79 |
| | Outside | 23.1% | \$0 | \$751 | \$289 | \$3,223 | \$54 |
| 23. Pneumonia, IP-Based | Inside | 80.2% | \$6,616 | \$649 | \$721 | \$1,751 | \$477 |
| | Outside | 19.8% | \$0 | \$280 | \$430 | \$1,566 | \$137 |

Table A.9 shows a cost breakdown by major service categories for costs billed inside and outside of the TIN for procedural episode types. The attributed TIN tends to bill roughly 90% of costs in procedural episode types. TINs not attributed the episode bill a low portion of costs during the trigger IP stay, which accounts for the majority of episode costs on average.

Table A-9: Average Non-Risk-Adjusted Costs Billed By Attributed TIN, Procedural Episodes

| Major Episode Type | | % of All Costs | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/Minor Proc. |
|---|---------|----------------|----------------------|--------------------------|---------------------------------------|----------|------------------|----------------|---------------------------|
| 24. Aortic Aneurysm Procedure (All) | Inside | 91.6% | \$28,290 | \$249 | \$3,155 | \$121 | \$174 | \$281 | \$6 |
| | Outside | 8.4% | \$0 | \$305 | \$687 | \$1,341 | \$880 | \$51 | \$11 |
| 27. Open Heart Valve Surgery (All) | Inside | 87.1% | \$39,527 | \$798 | \$4,340 | \$550 | \$640 | \$28 | \$21 |
| | Outside | 12.9% | \$0 | \$669 | \$1,541 | \$1,989 | \$1,604 | \$28 | \$60 |
| 31. Cholecystectomy and Common Duct Exploration (All) | Inside | 88.4% | \$4,141 | \$45 | \$436 | \$56 | \$1 | \$54 | \$2,439 |
| | Outside | 11.6% | \$0 | \$291 | \$335 | \$577 | \$24 | \$4 | \$185 |
| 34. Colonoscopy (All) | Inside | 89.9% | \$74 | \$9 | \$16 | \$4 | \$0 | \$2 | \$814 |
| | Outside | 10.1% | \$0 | \$7 | \$13 | \$18 | \$0 | \$1 | \$76 |
| 37. CABG (All) | Inside | 83.0% | \$30,438 | \$913 | \$3,467 | \$516 | \$547 | \$39 | \$16 |
| | Outside | 17.0% | \$0 | \$782 | \$1,722 | \$1,897 | \$1,712 | \$130 | \$38 |
| 40. Hip/Femur Fracture or Dislocation Treatment, IP-Based | Inside | 52.9% | \$13,108 | \$671 | \$1,601 | \$2,270 | \$694 | \$29 | \$14 |
| | Outside | 47.1% | \$86 | \$581 | \$1,051 | \$13,351 | \$3,090 | \$15 | \$57 |
| 41. Hip Replacement or Repair (All) | Inside | 81.6% | \$12,814 | \$358 | \$1,648 | \$370 | \$156 | \$44 | \$38 |
| | Outside | 18.4% | \$0 | \$221 | \$331 | \$3,937 | \$942 | \$6 | \$6 |
| 44. Knee Arthroplasty | Inside | 84.8% | \$12,195 | \$96 | \$1,556 | \$235 | \$88 | \$343 | \$21 |
| | Outside | 15.2% | \$0 | \$103 | \$234 | \$2,649 | \$660 | \$28 | \$5 |
| 45. Knee Joint Repair (All) | Inside | 94.4% | \$19 | \$7 | \$17 | \$3 | \$0 | \$30 | \$2,384 |
| | Outside | 5.6% | \$0 | \$12 | \$2 | \$18 | \$45 | \$2 | \$64 |
| 48. Lens and Cataract Procedures (All) | Inside | 93.9% | \$0 | \$0 | \$0 | \$0 | \$0 | \$1 | \$2,135 |
| | Outside | 6.1% | \$0 | \$0 | \$0 | \$0 | \$0 | \$1 | \$123 |

| Major Episode Type | | % of All Costs | IP Hospital: Trigger | IP Hospital: Non-Trigger | Phys. Services During Hospitalization | SNF | IP Rehab or LTCH | OP Major Proc. | OP Ambulatory/Minor Proc. |
|-------------------------|---------|----------------|----------------------|--------------------------|---------------------------------------|---------|------------------|----------------|---------------------------|
| 52. Mastectomy (All) | Inside | 80.9% | \$584 | \$150 | \$131 | \$30 | \$10 | \$4,098 | \$593 |
| | Outside | 19.1% | \$51 | \$137 | \$54 | \$136 | \$35 | \$452 | \$84 |
| 58. PCI (All) | Inside | 87.0% | \$7,434 | \$1,055 | \$800 | \$276 | \$135 | \$5,364 | \$13 |
| | Outside | 13.0% | \$23 | \$315 | \$330 | \$293 | \$101 | \$294 | \$32 |
| 61. Spinal Fusion (All) | Inside | 87.9% | \$26,041 | \$557 | \$4,288 | \$162 | \$286 | \$252 | \$13 |
| | Outside | 12.1% | \$0 | \$579 | \$639 | \$2,102 | \$1,860 | \$30 | \$13 |
| 67. TURP | Inside | 90.7% | \$658 | \$90 | \$107 | \$25 | \$1 | \$2,997 | \$577 |
| | Outside | 9.3% | \$0 | \$350 | \$84 | \$237 | \$11 | \$58 | \$22 |

B. ATTRIBUTION TO MEDICAL GROUP PRACTICE(S) AND SOLO PRACTITIONER(S)

Addendum B provides information on attribution of episodes to TINs, specifically focusing on:

- The percentage of IP Evaluation & Management (E&M) visits during the trigger event of an acute condition episode billed by attributed TIN;
- The percentage of acute condition episodes attributed to multiple TINs; and
- The percentage of procedural episodes attributed to multiple TINs.

The remainder of this introduction to Addendum B briefly describes the attribution rules used in the 2015 Supplemental QRURs. The following sections show national summary statistics for each of the bulleted items above in turn.

An episode is attributed to the TIN(s) determined to be the most responsible for the patient's initial care, based on a set of attribution rules. In addition, a lead eligible professional (EP) within the attributed TIN(s) is identified for informational purposes, using their National Provider Identifier (NPI). Table B.1 below provides a summary of the rules used to attribute episodes in the 2015 Supplemental QRURs. Further information can be found in the *Detailed Methods* document posted on [this CMS webpage](#).⁴

Table B-1: Summary of Medical Group Practice Attribution Methodology

| Episode Type | TIN(s) Attribution | Lead EP(s) Identified within Attributed TIN |
|-----------------|---|--|
| Acute Condition | TIN(s) billing at least 30% of IP E&M visits during trigger event | Top three EPs with highest number of IP E&M visits during trigger event |
| Procedural | TIN(s) listed on trigger physician claims concurrent with trigger event | Performing EP(s) on trigger physician claims concurrent with trigger event |

Acute condition episodes are attributed to all TINs that bill at least 30% of inpatient E&M visits during the trigger event. The “trigger event” is the inpatient (IP) stay that opens the episode. IP E&M visits are identified using CPT-4 codes. Procedural episodes are attributed to the TIN(s) billing the trigger procedure. Procedural episodes can be unattributed if there was no physician claim concurrent to the trigger event, or if the health care professional billing the trigger claim identifies him or herself as a professional type who is not likely to be the primary

⁴ The website URL is <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/PhysicianFeedbackProgram/Episode-Costs-and-Medicare-Episode-Grouping.html>.

individual managing the patient’s care. Detailed information on the modifiers used to identify such professionals is included in Appendix E of the *Detailed Methods* document.

5. Summary Statistics on Attribution to TIN(s)

Table B.2 lists a summary of IP E&M billing statistics for acute condition episodes. In the national sample, acute condition episodes had an average of 6-9 IP E&M visits during the trigger event, and the attributed TIN billed an average of 5 IP E&M visits during the trigger event.

Table B-2: Summary of IP E&M Visits, Acute Condition Episodes

| Major Episode Type | Average IP E&M Visits During Trigger Event | Average IP E&M Visits Billed by Attributed TIN | Average % Billed by Attributed TIN |
|---------------------------------------|--|--|------------------------------------|
| 1. AMI (All) | 8.3 | 5.0 | 68.5% |
| 8. Asthma/COPD, Acute Exacerbation | 6.5 | 4.4 | 78.6% |
| 9. AFib/Flutter, Acute Exacerbation | 6.9 | 4.3 | 70.2% |
| 10. Cellulitis (All) | 7.7 | 5.0 | 75.4% |
| 15. GI Hemorrhage (All) | 8.5 | 5.1 | 65.7% |
| 20. Heart Failure, Acute Exacerbation | 8.9 | 5.5 | 70.6% |
| 21. Ischemic Stroke | 8.5 | 5.4 | 69.4% |
| 22. Kidney and UTI | 6.5 | 4.6 | 80.1% |
| 23. Pneumonia, IP-Based | 7.7 | 5.3 | 78.8% |

Table B.3 shows the number of TINs attributed each acute condition episode type. About two-thirds of each acute condition episode type were attributed to one TIN that billed at least 30% IP E&M visits during the trigger event (i.e., triggering IP stay). About one-third of each acute condition episode type were attributed to more than one TIN because multiple TINs billed at least 30% IP E&M visits during the trigger event. A low percentage of each acute condition episode type were unattributed because no IP E&M claims were billed during the trigger event or if no TIN billed at least 30% IP E&M visits during the trigger event.

Table B-3: Summary of Attribution Statistics, Acute Condition Episodes

| Major Episode Type | Attributed to One TIN (Only one TIN billed IP E&M visits during trigger event) | Attributed to One TIN (2+ TINs billed IP E&M visits during trigger event but only one TIN billed at least 30%) | Attributed to Multiple TINs (2+ TINs billed at least 30% of IP E&M visits during trigger event) | Unattributed |
|------------------------------------|---|---|--|--------------|
| 1. AMI (All) | 30.3% | 28.5% | 36.9% | 4.3% |
| 8. Asthma/COPD, Acute Exacerbation | 50.2% | 19.6% | 26.8% | 3.5% |

| Major Episode Type | Attributed to One TIN <i>(Only one TIN billed IP E&M visits during trigger event)</i> | Attributed to One TIN <i>(2+ TINs billed IP E&M visits during trigger event but only one TIN billed at least 30%)</i> | Attributed to Multiple TINs <i>(2+ TINs billed at least 30% of IP E&M visits during trigger event)</i> | Unattributed |
|---------------------------------------|---|---|--|---------------------|
| 9. AFib/Flutter, Acute Exacerbation | 34.9% | 23.4% | 39.0% | 2.8% |
| 10. Cellulitis (All) | 42.9% | 24.9% | 28.2% | 4.0% |
| 15. GI Hemorrhage (All) | 22.9% | 37.2% | 35.8% | 4.0% |
| 20. Heart Failure, Acute Exacerbation | 35.4% | 25.4% | 35.3% | 3.9% |
| 21. Ischemic Stroke | 28.7% | 36.5% | 31.0% | 3.7% |
| 22. Kidney and UTI | 51.3% | 23.2% | 22.0% | 3.5% |
| 23. Pneumonia, IP-Based | 49.1% | 23.3% | 23.9% | 3.7% |

Table B.4 shows the number of TINs attributed each procedural episode type. About 90-100% of each procedural episode type were attributed to one TIN. Episodes are typically attributed to more than one TIN in the case of co-surgeons.

Table B-4: Summary of Attribution Statistics, Procedural Episodes

| Major Episode Type | Attributed to One TIN | Attributed to 2+ TINs | Unattributed |
|---|------------------------------|------------------------------|---------------------|
| 24. Aortic Aneurysm Procedure (All) | 89.6% | 10.4% | 0.0% |
| 27. Open Heart Valve Surgery (All) | 89.4% | 10.1% | 0.5% |
| 31. Cholecystectomy and Common Duct Exploration (All) | 94.8% | 5.2% | 0.0% |
| 34. Colonoscopy (All) | 99.9% | 0.1% | 0.0% |
| 37. CABG (All) | 89.9% | 9.6% | 0.5% |
| 40. Hip/Femur Fracture or Dislocation Treatment, IP-Based | 94.7% | 4.5% | 0.8% |
| 41. Hip Replacement or Repair (All) | 93.6% | 6.4% | 0.0% |
| 44. Knee Arthroplasty | 93.4% | 6.6% | 0.0% |
| 45. Knee Joint Repair (All) | 99.6% | 0.4% | 0.0% |
| 48. Lens and Cataract Procedures (All) | 91.4% | 8.6% | 0.0% |
| 52. Mastectomy (All) | 95.2% | 2.7% | 2.1% |
| 58. PCI (All) | 98.8% | 0.1% | 1.1% |
| 61. Spinal Fusion (All) | 88.8% | 11.2% | 0.0% |
| 67. TURP | 100.0% | 0.0% | 0.0% |

C. COST DISTRIBUTION OF EPISODE TYPES

Addendum C displays cost distributions across episode subtypes for both acute condition and procedural episode types. All costs displayed are risk-adjusted and payment-standardized. Major episode types with subtypes only have distributions displayed for the subtypes to facilitate more accurate comparison between episodes, as higher cost episode subtypes could skew the major episode cost distribution.

The following tables show episode costs for the 1st, 25th, 50th, 75th, and 99th cost percentiles within an episode type. Table C.1 displays cost distributions for acute condition episodes, and Table C.2 displays cost distributions for procedural episodes. The tables alternate white and grey rows to delineate subtypes within the same major episode type or major episode types that do not have any subtypes (e.g., all episode subtypes for AMI are white rows, while the following row for Asthma/COPD is grey).

Table C-1: Acute Condition Episode Risk-Adjusted Cost Distribution

| Episode Type | Count | 1st | 25th | 50th | 75th | 99th |
|--|---------|----------|----------|----------|----------|-----------|
| 2. AMI without PCI/CABG, NSTEMI | 39,923 | \$5,822 | \$9,730 | \$12,454 | \$19,018 | \$62,715 |
| 3. AMI with PCI, NSTEMI | 24,704 | \$14,405 | \$17,291 | \$19,415 | \$24,095 | \$57,470 |
| 4. AMI with CABG, NSTEMI | 3,097 | \$32,275 | \$43,976 | \$48,733 | \$59,523 | \$115,162 |
| 5. AMI without PCI/CABG, STEMI | 4,533 | \$5,327 | \$9,277 | \$12,386 | \$16,613 | \$52,745 |
| 6. AMI with PCI, STEMI | 17,117 | \$14,059 | \$17,129 | \$19,401 | \$25,238 | \$55,681 |
| 7. AMI with CABG, STEMI | 541 | \$26,917 | \$44,404 | \$50,057 | \$61,964 | \$106,444 |
| 8. Asthma/COPD, Acute Exacerbation | 202,238 | \$4,611 | \$7,467 | \$9,063 | \$13,473 | \$47,680 |
| 9. Afib/Flutter, Acute Exacerbation | 136,983 | \$4,431 | \$6,751 | \$8,308 | \$12,039 | \$46,687 |
| 11. Cellulitis in Diabetics | 44,818 | \$3,964 | \$6,772 | \$8,213 | \$12,499 | \$55,197 |
| 12. Cellulitis in Patients with Wound, Non-Diabetic | 79,767 | \$3,922 | \$6,422 | \$7,772 | \$11,431 | \$52,515 |
| 13. Cellulitis in Obese Patients, Non-Diabetic without Wound | 59 | \$3,060 | \$5,983 | \$7,614 | \$9,791 | \$69,680 |
| 14. Cellulitis in All Other Patients | 579 | \$3,139 | \$5,966 | \$7,093 | \$9,118 | \$33,487 |
| 16. GI Hemorrhage, Upper and Lower | 49,065 | \$5,689 | \$8,505 | \$9,552 | \$12,008 | \$47,904 |
| 17. GI Hemorrhage, Upper | 68,457 | \$5,138 | \$8,580 | \$9,743 | \$12,179 | \$46,227 |
| 18. GI Hemorrhage, Lower | 55,763 | \$4,684 | \$7,644 | \$8,674 | \$10,542 | \$43,853 |
| 19. GI Hemorrhage, Undefined | 21,866 | \$4,476 | \$8,181 | \$9,508 | \$12,351 | \$49,301 |
| 20. Heart Failure, Acute Exacerbation | 299,424 | \$5,805 | \$8,920 | \$11,460 | \$19,426 | \$61,024 |
| 21. Ischemic Stroke | 141,429 | \$6,496 | \$10,435 | \$17,483 | \$34,541 | \$86,197 |
| 22. Kidney and UTI | 204,278 | \$3,835 | \$6,232 | \$7,920 | \$16,161 | \$58,160 |
| 23. Pneumonia, IP-Based | 212,989 | \$4,993 | \$8,354 | \$10,245 | \$15,527 | \$56,338 |

Table C-2: Procedural Episode Risk-Adjusted Cost Distribution

| Episode Type | Count | 1st | 25th | 50th | 75th | 99th |
|--|--------------|------------|-------------|-------------|-------------|-------------|
| 25. Abdominal Aortic Aneurysm Procedure | 18,502 | \$9,551 | \$25,259 | \$27,622 | \$31,061 | \$72,112 |
| 26. Thoracic Aortic Aneurysm Procedure | 6,710 | \$24,775 | \$45,600 | \$52,748 | \$64,027 | \$142,631 |
| 28. Both Aortic and Mitral Valve Surgery | 2,136 | \$42,059 | \$54,127 | \$61,285 | \$76,893 | \$166,781 |
| 29. Aortic or Mitral Valve Surgery | 20,412 | \$35,643 | \$46,052 | \$51,136 | \$58,595 | \$114,484 |
| 30. Pulmonary or Tricuspid Valve Surgery | 251 | \$42,491 | \$52,486 | \$60,546 | \$73,933 | \$138,418 |
| 32. Cholecystectomy | 126,999 | \$1,959 | \$7,750 | \$8,629 | \$9,605 | \$25,664 |
| 33. Surgical Biliary Tract Procedures | 213 | \$2,562 | \$9,096 | \$11,660 | \$14,536 | \$56,522 |
| 35. Colonoscopy with Invasive Procedures | 1,589,154 | \$595 | \$1,077 | \$1,339 | \$1,724 | \$4,178 |
| 36. Colonoscopy without Invasive Procedures | 430,629 | \$246 | \$727 | \$885 | \$1,092 | \$2,346 |
| 38. CABG With AMI | 12,102 | \$33,543 | \$45,238 | \$50,849 | \$62,067 | \$122,551 |
| 39. CABG Without AMI | 33,480 | \$26,034 | \$36,574 | \$40,848 | \$47,236 | \$89,856 |
| 40. Hip/Femur Fracture/Dislocation Treatment, IP-Based | 77,055 | \$15,382 | \$28,265 | \$37,693 | \$48,677 | \$90,545 |
| 42. Hip Arthroplasty | 142,963 | \$11,553 | \$17,726 | \$20,845 | \$26,097 | \$61,884 |
| 43. Hip Arthroscopy and Hip Joint Repair | 720 | \$2,033 | \$5,826 | \$7,590 | \$10,045 | \$19,774 |
| 44. Knee Arthroplasty | 252,454 | \$10,212 | \$16,573 | \$19,155 | \$23,202 | \$45,476 |
| 46. Meniscus Repair | 77,397 | \$1,897 | \$2,710 | \$3,261 | \$4,011 | \$9,058 |
| 47. Knee Ligament Repair | 123 | \$3,116 | \$6,173 | \$8,497 | \$11,325 | \$33,811 |
| 49. Cataract Surgery | 970,729 | \$2,298 | \$2,893 | \$3,134 | \$4,038 | \$7,450 |
| 50. Discission | 447,565 | \$342 | \$550 | \$727 | \$956 | \$4,650 |
| 51. IOL Removal/Repositioning or Secondary IOL Insertion | 8,985 | \$1,621 | \$2,691 | \$3,848 | \$5,527 | \$11,743 |
| 53. Lumpectomy or Partial Mastectomy without Reconstruction | 24,498 | \$2,947 | \$6,109 | \$8,148 | \$11,079 | \$22,606 |
| 54. Lumpectomy or Partial Mastectomy with Reconstruction | 478 | \$4,110 | \$9,599 | \$13,127 | \$17,692 | \$31,983 |
| 55. Simple or Modified Radical Mastectomy without Reconstruction | 10,529 | \$4,640 | \$8,124 | \$10,195 | \$12,944 | \$30,480 |
| 56. Simple or Modified Radical Mastectomy with Reconstruction | 1,466 | \$6,999 | \$12,498 | \$14,758 | \$18,090 | \$32,019 |
| 57. Subcutaneous Mastectomy | 275 | \$3,573 | \$7,979 | \$11,527 | \$15,019 | \$26,725 |
| 59. PCI, IP-Based | 107,545 | \$14,141 | \$17,455 | \$19,668 | \$25,184 | \$62,241 |
| 60. PCI, OP-Based | 99,769 | \$2,972 | \$11,249 | \$12,812 | \$16,304 | \$42,887 |

| Episode Type | Count | 1st | 25th | 50th | 75th | 99th |
|---|--------------|------------|-------------|-------------|-------------|-------------|
| 62. Anterior Fusion - Single | 2,914 | \$12,245 | \$31,597 | \$34,273 | \$40,244 | \$105,333 |
| 63. Anterior Fusion - Two Levels | 1,609 | \$20,844 | \$41,199 | \$49,505 | \$64,426 | \$150,621 |
| 64. Posterior/Posterior-lateral Approach Fusion - Single | 29,465 | \$13,999 | \$28,720 | \$31,067 | \$35,695 | \$78,282 |
| 65. Posterior/Posterior-lateral Approach Fusion - Two or Three Levels | 22,313 | \$19,626 | \$32,299 | \$36,977 | \$46,655 | \$99,725 |
| 66. Combined Spinal Fusion | 5,448 | \$38,753 | \$45,708 | \$50,081 | \$60,079 | \$147,289 |
| 67. TURP for Benign Prostatic Hyperplasia | 76,524 | \$1,810 | \$4,613 | \$5,510 | \$6,705 | \$20,661 |