



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

2018 Medicare Fee-for-Service Supplemental Improper Payment Data

TABLE OF CONTENTS

| | |
|--|-----------|
| Summary of High Level Findings..... | 1 |
| 91.9 Percent Accuracy Rate and 8.1 Percent Improper Payment Rate | 1 |
| Figure 1: Payment Accuracy | 1 |
| Common Causes of Improper Payments | 2 |
| Figure 2: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments | 2 |
| Figure 3: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling) | 2 |
| Figure 4: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments and Improper Payments (in Millions) by Improper Payment Drivers | 3 |
| Monetary Loss Findings | 4 |
| Figure 5: Improper Payments (in Millions) and Percentage of Improper Payments by Monetary Loss and Improper Payment Rate Error Categories (Including Documentation Non-Compliance) | 4 |
| Detailed Information on Insufficient Documentation Errors by Claim Type | 5 |
| Figure 6: Universal Errors as a Percentage of Improper Payments Due to Insufficient Documentation | 5 |
| Figure 7: Claim Type Categories by Percentage of Insufficient Documentation Improper Payments by Universal Errors | 6 |
| Figure 8: Claim Type Categories by Percentage of Insufficient Documentation Improper Payments by Multiple Universal Errors..... | 6 |
| Part A (Excluding Hospital IPPS) | 7 |
| Figure 9: Universal Errors as a Percentage of Part A (Excluding Hospital IPPS) Improper Payments Due to Insufficient Documentation | 7 |
| Figure 10: Multiple Universal Errors as a Percentage of Part A (Excluding Hospital IPPS) Improper Payments Due to Insufficient Documentation..... | 7 |
| Table 1: Top Root Causes of Insufficient Documentation Errors in Part A (Excluding Hospital IPPS) | 8 |
| Part B | 9 |
| Figure 11: Universal Errors as a Percentage of Part B Improper Payments Due to Insufficient Documentation | 9 |
| Figure 12: Multiple Universal Errors as a Percentage of Part B Improper Payments Due to Insufficient Documentation | 9 |
| Table 2: Top Root Causes of Insufficient Documentation Errors in Part B..... | 10 |
| Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS)..... | 11 |
| Figure 13: Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation | 11 |
| Figure 14: Multiple Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation | 11 |
| Table 3: Top Root Causes of Insufficient Documentation Errors in DMEPOS..... | 12 |
| Supplemental Statistical Reporting..... | 13 |
| Appendix A: Summary of Projected Improper Payments Adjusted for A/B Rebill | 13 |

| | |
|--|----|
| Table A1: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Adjusted for Impact of A/B Rebilling) | 13 |
| Table A2: Comparison of 2017 and 2018 Overall Improper Payment Rates by Error Category (Adjusted for Impact of A/B Rebilling) | 13 |
| Table A3: Improper Payment Rate Categories by Percentage of 2018 Overall Improper Payments (Adjusted for Impact of A/B Rebilling) | 14 |
| Table A4: Improper Payment Rates and Projected Improper Payments by Claim Type and Over/Under Payments (Dollars in Billions) (Adjusted for Impact of A/B Rebilling)..... | 14 |
| Table A5: 2018 Projected Improper Payments by Type of Error and Clinical Setting (Dollars in Billions) (Adjusted for Impact of A/B Rebilling) | 14 |
| Table A6: Summary of National Improper Payment Rates by Year and by Error Category (Adjusted for Impact of A/B Rebilling) | 15 |
| Table A7: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Adjusted for Impact of A/B Rebilling) | 16 |

Appendix B: Summary of Projected Improper Payments Unadjusted for A/B Rebill17

| | |
|---|----|
| Table B1: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)..... | 17 |
| Table B2: Comparison of 2017 and 2018 Overall Improper Payment Rates by Error Category (Unadjusted for Impact of A/B Rebilling)..... | 17 |
| Table B3: Improper Payment Rate Categories by Percentage of 2018 Overall Improper Payments (Unadjusted for Impact of A/B Rebilling)..... | 17 |
| Table B4: Improper Payment Rates and Projected Improper Payments by Claim Type and Over/Under Payments (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)..... | 18 |
| Table B5: 2018 Projected Improper Payments by Type of Error and Clinical Setting (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)..... | 18 |
| Table B6: Summary of National Improper Payment Rates by Year and by Error Category (Unadjusted for Impact of A/B Rebilling)..... | 19 |
| Table B7: Projected Improper Payments by Length of Stay (Unadjusted for Impact of A/B Rebilling).. | 20 |
| Table B8: Medicare FFS Projected Improper Payments by State (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling) | 20 |
| Table B9: Medicare FFS Projected Improper Payments by State – Parts A & B (Excluding Home Health and Hospice) (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling)..... | 22 |
| Table B10: Medicare FFS Projected Improper Payments by State – DMEPOS Only (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling)..... | 24 |
| Table B11: Medicare FFS Projected Improper Payments by State – Home Health and Hospice Only (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling)..... | 26 |

Appendix C: Medicare Access and CHIP Reauthorization Act of 2015 Section 517

Reporting27

| | |
|--|----|
| Table C1: Services Paid under the Physician Fee Schedule (PFS) in which the Fee Schedule Amount is in Excess of \$250 and the Improper Payment Rate is in Excess of 20 Percent | 27 |
|--|----|

Appendix D: Projected Improper Payments and Type of Error by Type of Service for Each Claim Type.....28

| | |
|---|----|
| Table D1: Top 20 Service Types with Highest Improper Payments: Part B..... | 28 |
| Table D2: Top 20 Service Types with Highest Improper Payments: DMEPOS..... | 29 |
| Table D3: Top Service Types with Highest Improper Payments: Part A Excluding Hospital IPPS..... | 30 |
| Table D4: Top 20 Service Types with Highest Improper Payments: Part A Hospital IPPS | 31 |

Appendix E: Improper Payment Rates and Type of Error by Type of Service for Each Claim Type33

| | |
|---|----|
| Table E1: Top 20 Service Type Improper Payment Rates: Part B | 33 |
| Table E2: Top 20 Service Type Improper Payment Rates: DMEPOS | 34 |
| Table E3: Top Service Type Improper Payment Rates: Part A Excluding Hospital IPPS | 35 |
| Table E4: Top 20 Service Type Improper Payment Rates: Part A Hospital IPPS | 36 |

Appendix F: Projected Improper Payments by Type of Service for Each Type of Error37

| | |
|---|----|
| Table F1: Top 20 Types of Services with No Documentation Errors | 37 |
| Table F2: Top 20 Types of Services with Insufficient Documentation Errors | 38 |
| Table F3: Top 20 Types of Services with Medical Necessity Errors | 39 |
| Table F4: Top 20 Types of Services with Incorrect Coding Errors | 40 |
| Table F5: Top 20 Types of Services with Downcoding Errors | 41 |
| Table F6: Top 20 Types of Services with Other Errors | 42 |

Appendix G: Projected Improper Payments by Type of Service for Each Claim Type43

| | |
|--|----|
| Table G1: Improper Payment Rates by Service Type: Part B | 43 |
| Table G2: Improper Payment Rates by Service Type: DMEPOS | 46 |
| Table G3: Improper Payment Rates by Service Type: Part A Excluding Hospital IPPS | 48 |
| Table G4: Improper Payment Rates by Service Type: Part A Hospital IPPS | 49 |

Appendix H: Projected Improper Payments by Referring Provider Type for Specific Types of Service.....53

| | |
|--|----|
| Table H1: Improper Payment Rates for Lab tests - other (non-Medicare fee schedule) by Referring Provider | 53 |
| Table H2: Improper Payment Rates for Office visits - established by Provider Type | 53 |
| Table H3: Improper Payment Rates for Hospital visit - subsequent by Provider Type | 54 |
| Table H4: Improper Payment Rates for Oxygen Supplies/Equipment by Referring Provider..... | 55 |
| Table H5: Improper Payment Rates for CPAP by Referring Provider..... | 55 |

Appendix I: Projected Improper Payments by Provider Type for Each Claim Type56

| | |
|--|----|
| Table I1: Improper Payment Rates and Amounts by Provider Type: Part B | 56 |
| Table I2: Improper Payment Rates and Amounts by Provider Type: DMEPOS | 58 |
| Table I3: Improper Payment Rates and Amounts by Provider Type: Part A Excluding Hospital IPPS .. | 59 |
| Table I4: Improper Payment Rates and Amounts by Provider Type: Part A Hospital IPPS..... | 59 |

Appendix J: Improper Payment Rates and Type of Error by Provider Type for Each Claim Type60

| | |
|---|----|
| Table J1: Improper Payment Rates by Provider Type and Type of Error: Part B | 60 |
| Table J2: Improper Payment Rates by Provider Type and Type of Error: DMEPOS | 61 |
| Table J3: Improper Payment Rates by Provider Type and Type of Error: Part A Excluding Hospital IPPS | 62 |
| Table J4: Improper Payment Rates by Provider Type and Type of Error: Part A Hospital IPPS | 63 |

Appendix K: Coding Information64

| | |
|---|----|
| Table K1: E&M Services by Improper Payment Rates and Amounts and Type of Error..... | 64 |
| Table K2: Impact of 1-Level E&M (Top 20)..... | 65 |
| Table K3: Type of Services with Upcoding Errors: Part B | 66 |
| Table K4: Type of Services with Upcoding Errors: DMEPOS | 66 |
| Table K5: Type of Services with Upcoding Errors: Part A Excluding Hospital IPPS | 67 |
| Table K6: Type of Services with Upcoding Errors: Part A Hospital IPPS | 67 |

Appendix L: Overpayments.....69

| | |
|---|----|
| Table L1: Top 20 Service-Specific Overpayment Rates: Part B | 69 |
|---|----|

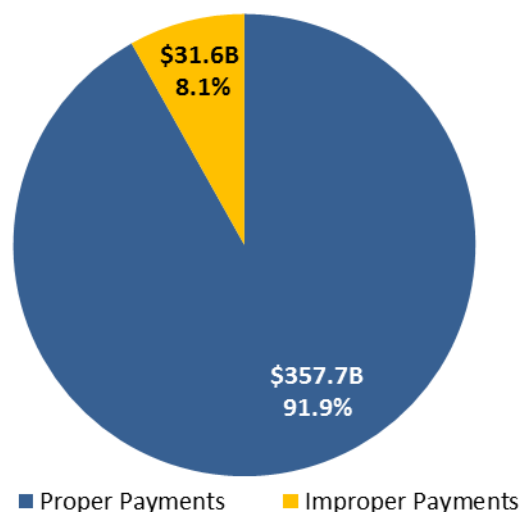
| | |
|---|-----------|
| Table L2: Top 20 Service-Specific Overpayment Rates: DMEPOS..... | 70 |
| Table L3: Service-Specific Overpayment Rates: Part A Excluding Hospital IPPS | 70 |
| Table L4: Top 20 Service-Specific Overpayment Rates: Part A Hospital IPPS | 72 |
| Table L5: Overpayment Rate: All Claim Types | 72 |
| Appendix M: Underpayments | 73 |
| Table M1: Service-Specific Underpayment Rates: Part B | 73 |
| Table M2: Service-Specific Underpayment Rates: DMEPOS | 73 |
| Table M3: Service-Specific Underpayment Rates: Part A Excluding Hospital IPPS | 74 |
| Table M4: Service-Specific Underpayment Rates: Part A Hospital IPPS | 74 |
| Table M5: Underpayment Rate: All Claim Types | 75 |
| Appendix N: Statistics and Other Information for the CERT Sample | 76 |
| Summary of Sampling and Estimation Methodology for the CERT Program..... | 76 |
| Table N1: Lines in Error: Part B | 78 |
| Table N2: Lines in Error: DMEPOS | 79 |
| Table N3: Claims in Error: Part A Excluding Hospital IPPS..... | 80 |
| Table N4: Claims in Error: Part A Hospital IPPS | 81 |
| Table N5: “Included In” and “Excluded From” the Sample | 82 |
| Table N6: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate: Part B..... | 83 |
| Table N7: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate: DMEPOS..... | 83 |
| Table N8: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate: Part A Including Hospital IPPS | 83 |
| Appendix O: List of Acronyms..... | 84 |

SUMMARY OF HIGH LEVEL FINDINGS

This document supplements improper payment information in the annual Department of Health and Human Services Agency Financial Report ([HHS AFR](#)). The Improper Payments Information Act of 2002 (IPIA), as amended by the Improper Payments Elimination and Recovery Act of 2010 (IPERA) and the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA), requires improper payment reporting in the HHS AFR. The improper payment rate calculation complies with the requirements of Office of Management and Budget (OMB) Circular A-123, Appendix C. The Centers for Medicare & Medicaid Services (CMS) measures the Medicare Fee-for-Service (FFS) improper payment rate through the Comprehensive Error Rate Testing (CERT) program.

91.9 Percent Accuracy Rate and 8.1 Percent Improper Payment Rate^{1, 2, 3}

Figure 1: Payment Accuracy



¹ HHS published the 2018 Medicare FFS improper payment rate in the Federal Fiscal Year (FY) 2018 HHS AFR. The FY runs from October 1 to September 30. The Medicare FFS sampling period does not correspond with the FY due to practical constraints with claims review and rate calculation methodologies. The FY 2018 Medicare FFS improper payment rate included claims submitted during the 12-month period from July 1, 2016 through June 30, 2017.

² CMS adjusted the improper payment rate by 0.2 percentage points (\$0.6 billion) from 8.3 percent to 8.1 percent to account for the effect of rebilling inpatient hospital claims denied under Medicare Part A (Part A to B rebilling). The Part A to B rebilling adjustment factor was calculated by selecting a random sub-sample of Part A inpatient claims selected by the CERT program and repricing the individual services provided under Part B. Because this repricing process was not applied to all of the Part A inpatient claims selected by the CERT program, the Part A to B rebilling adjustment factor could only be applied to the high-level calculations (i.e., the overall, Part A Total, and Part A Hospital Inpatient Prospective Payment System (IPPS) improper payment rates). This methodology is unchanged from 2012 through 2018.

³ For purposes of this report, correct payments are considered total Medicare FFS payments minus payments considered an improper payment as identified through CERT. Please note that instances of fraud or other problems not discerned during the CERT review could still be present.

Common Causes of Improper Payments

Figure 2: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments

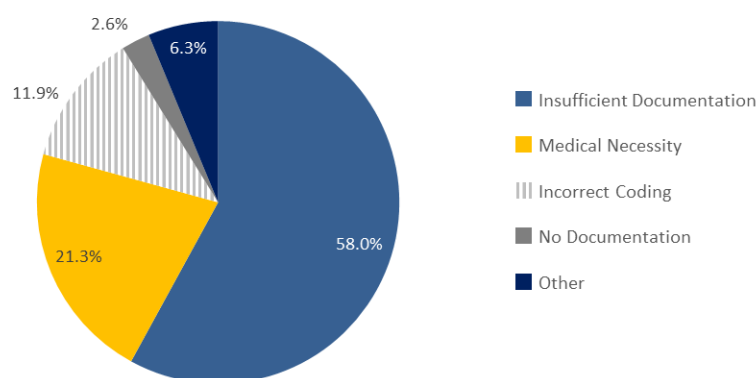
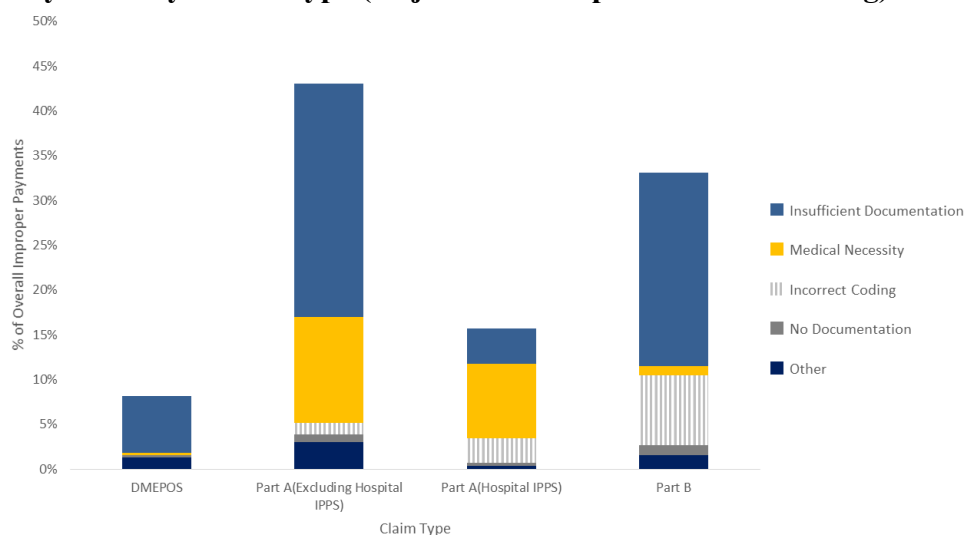
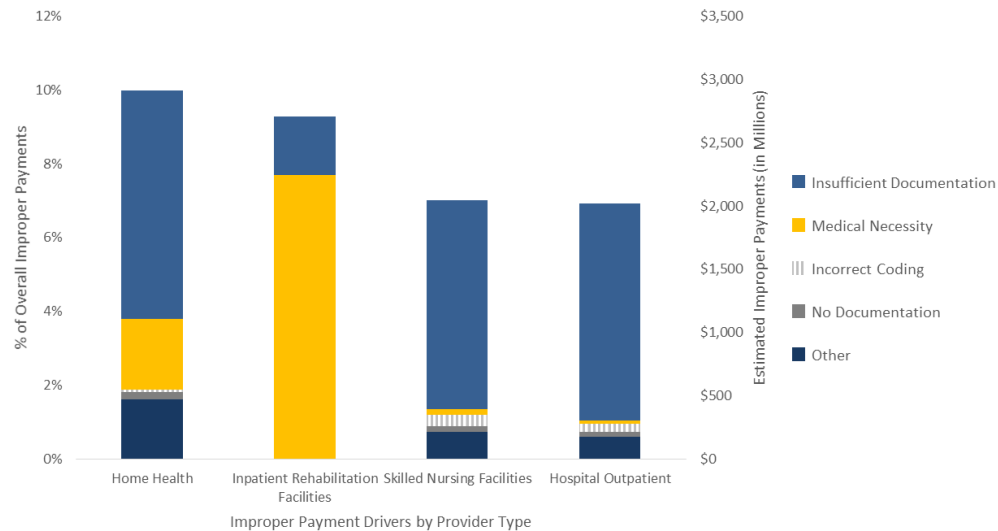


Figure 3: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling)⁴



⁴ Improper payment rate reporting for Part A (Excluding Hospital IPPS) providers is determined by the type of bill submitted to Medicare for payment. Providers, facilities, and suppliers that submit institutional claims via the electronic American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 Health Care Claim: Institutional (837) or paper claim format Uniform Billing (UB)-04, are included in the Part A (Excluding Hospital IPPS) improper payment rate calculation. Examples of providers, facilities, and suppliers that bill using these formats include hospitals, skilled nursing facilities, home health and hospice providers, renal dialysis facilities, comprehensive outpatient rehabilitation facilities, rural health clinics, and federally qualified health centers. These institutional claims may include professional services that may be paid under Part A or Part B, yet are ultimately included in the CERT Part A (Excluding Hospital IPPS) improper payment rate measurement because they are submitted on the ASC X12 837 or UB-04.

Figure 4: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments and Improper Payments (in Millions) by Improper Payment Drivers



Home health services is defined as all services with a provider type of Home Health Agency. The projected improper payment amount for Home Health Services during the 2018 report period was \$3.2 billion, resulting in an improper payment rate of 17.6 percent.

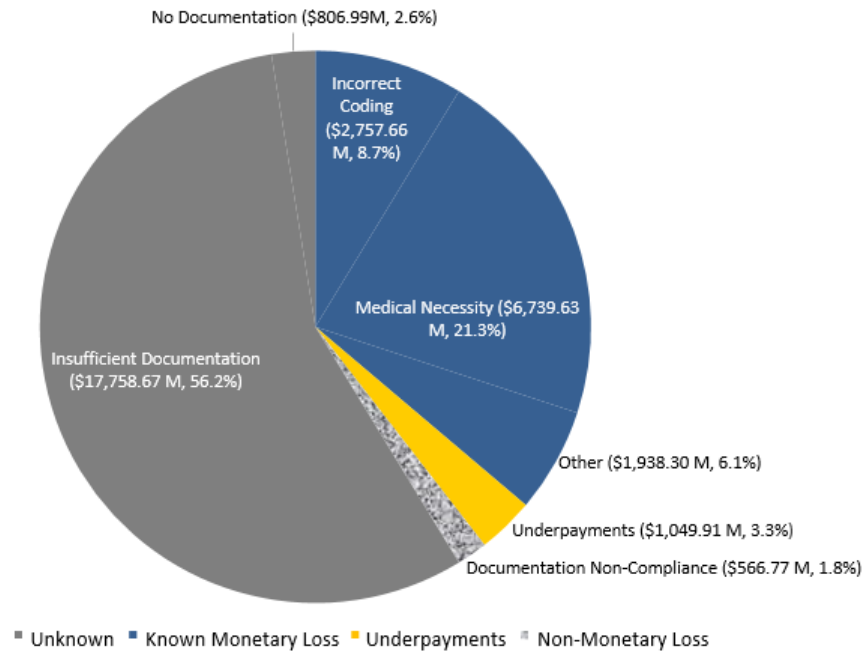
Inpatient rehabilitation facilities (IRF) is defined as any service with a provider type of either inpatient rehabilitation hospitals or inpatient rehabilitation unit. The projected improper payment amount for IRF during the 2018 report period was \$2.9 billion, resulting in an improper payment rate of 41.5 percent.

Skilled nursing facilities (SNF) is defined as all services with a provider type of SNF, including SNF inpatient, SNF outpatient, and SNF inpatient Part B. The projected improper payment amount for SNF services during the 2018 report period was \$2.2 billion, resulting in an improper payment rate of 6.5 percent.

Hospital outpatient services is defined as all services billed with type of bill 12x through 19x (e.g., Hospital Outpatient Prospective Payment System (OPPS), Laboratory, and Others). The projected improper payment amount for hospital outpatient services during the 2018 report period was \$2.2 billion, resulting in an improper payment rate of 3.3 percent.

Monetary Loss Findings⁵

Figure 5: Improper Payments (in Millions) and Percentage of Improper Payments by Monetary Loss and Improper Payment Rate Error Categories (Including Documentation Non-Compliance)⁶



⁵ The FY 2018 HHS AFR contains detailed information on the Medicare FFS monetary loss findings.

⁶ Documentation Non-Compliance errors occur when the services or items were covered and necessary, were provided/delivered to an eligible beneficiary, and were paid in the correct amount, but the medical record documentation did not comply with rules and requirements per Medicare policy. Had the documentation non-compliance error been corrected, the government would have made the payment in the assigned amount, and therefore, it represents a “non-monetary loss” to the government..

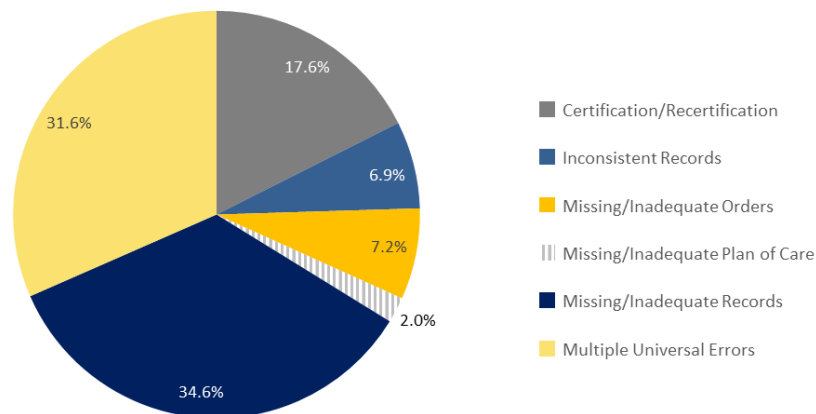
Detailed Information on Insufficient Documentation Errors by Claim Type

In order to provide a more thorough understanding of insufficient documentation errors, CMS examined the root causes of these errors and developed a universal error for the insufficient documentation errors. The root cause of the insufficient documentation error must meet the universal error definition to be included in that classification.

The universal error names and definitions are:

| Universal Error Name ⁷ | Universal Error Definition ⁸ |
|-----------------------------------|---|
| Missing/Inadequate Orders | A valid provider's order (or intent to order for certain services) for the service/supply has not been submitted. |
| Missing/Inadequate Plan of Care | A valid provider's plan of care for the service has not been submitted. |
| Missing/Inadequate Records | A required record has not been submitted or has not been fully completed. |
| Inconsistent Records | The records submitted have inconsistent information (e.g., date, provider, service, beneficiary, etc.) |
| Certification/Recertification | Certification/recertification requirements not met. |

Figure 6: Universal Errors as a Percentage of Improper Payments Due to Insufficient Documentation



⁷ Missing is defined as the provider fails to submit a required document, in its entirety. Inadequate is defined as the provider has submitted the documentation; however, a required element is not complete. CMS is exploring new and innovative approaches to providing additional data on missing and inadequate insufficient documentation errors in future reporting.

⁸ A valid provider's order is defined as meeting the required elements for the order. A valid provider's plan of care is defined as meeting the required elements for plan of care.

Figure 7: Claim Type Categories by Percentage of Insufficient Documentation Improper Payments by Universal Errors

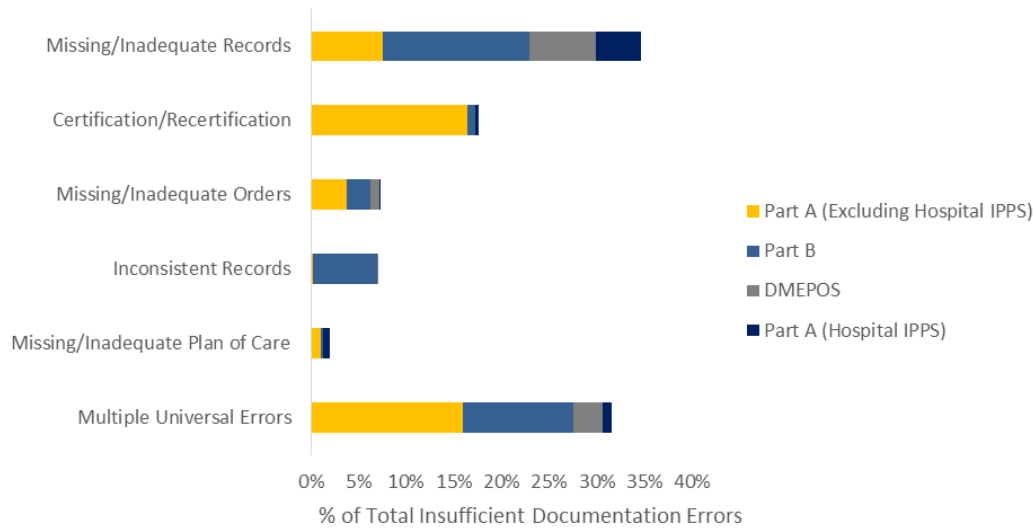
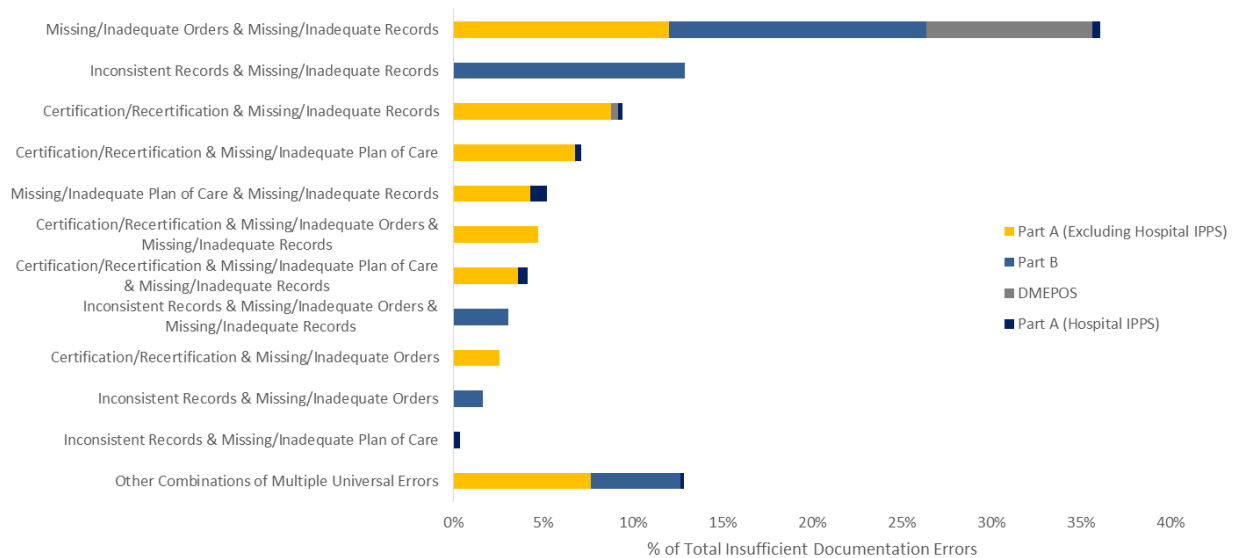


Figure 8: Claim Type Categories by Percentage of Insufficient Documentation Improper Payments by Multiple Universal Errors⁹



⁹ Each claim can have more than one root cause for an insufficient documentation error; therefore, there could also be more than one universal error.

Part A (Excluding Hospital IPPS)

Figure 9: Universal Errors as a Percentage of Part A (Excluding Hospital IPPS) Improper Payments Due to Insufficient Documentation

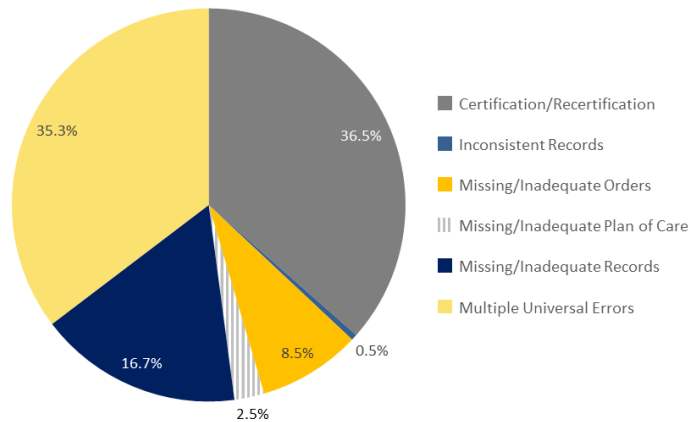


Figure 10: Multiple Universal Errors as a Percentage of Part A (Excluding Hospital IPPS) Improper Payments Due to Insufficient Documentation

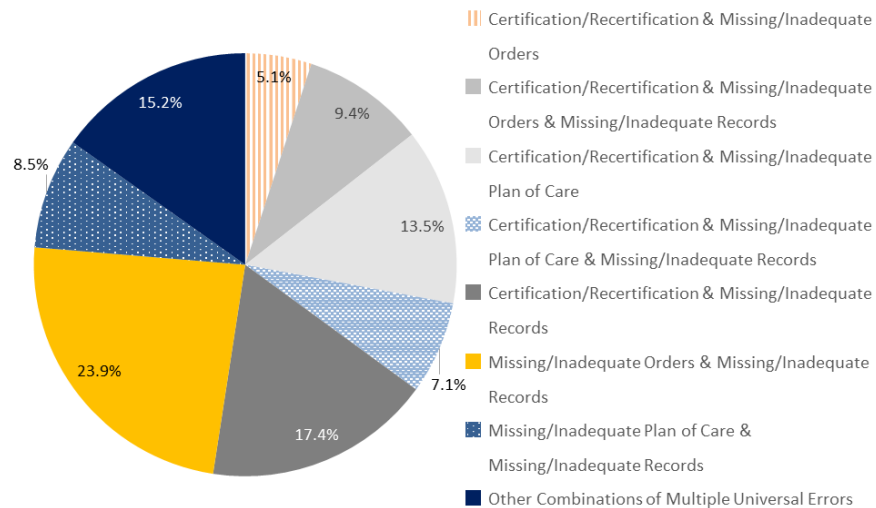


Table 1: Top Root Causes of Insufficient Documentation Errors in Part A (Excluding Hospital IPPS)

| Root Cause Description | Universal Error Name | Claim Count ¹⁰ |
|--|-------------------------------|---------------------------|
| A valid provider's order, or element of an order, was not submitted. | Missing/Inadequate Orders | 177 |
| Documentation to support medical necessity was not submitted. | Missing/Inadequate Records | 163 |
| Valid provider's intent to order (for certain services) was not submitted. | Missing/Inadequate Orders | 135 |
| Home health certification requirements, in entirety or an element, was not submitted. | Certification/Recertification | 102 |
| Skilled nursing facility certification/recertification requirements, in entirety or an element, was not submitted. | Certification/Recertification | 79 |
| Hospice certification/recertification requirements, in entirety or an element, was not submitted. | Certification/Recertification | 54 |

¹⁰ A claim can have more than one root cause for an insufficient documentation error.

Part B

Figure 11: Universal Errors as a Percentage of Part B Improper Payments Due to Insufficient Documentation

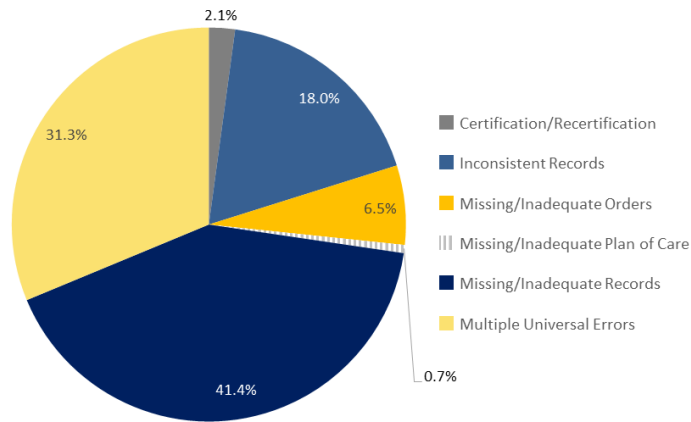


Figure 12: Multiple Universal Errors as a Percentage of Part B Improper Payments Due to Insufficient Documentation

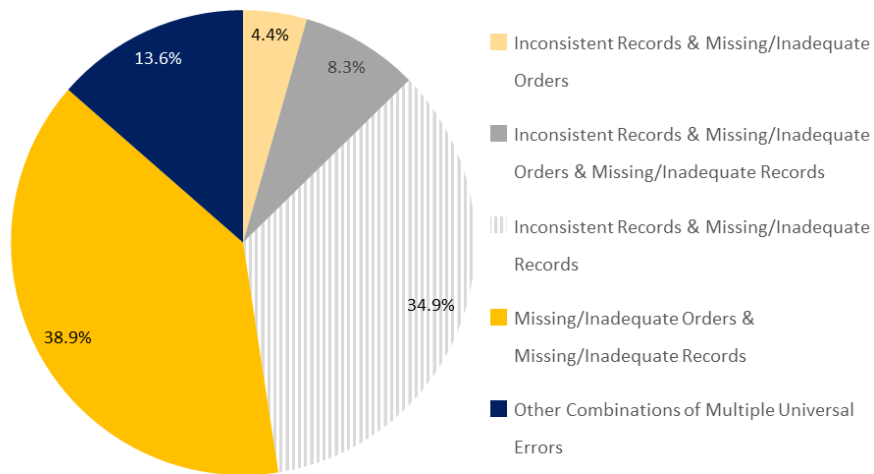


Table 2: Top Root Causes of Insufficient Documentation Errors in Part B

| Root Cause Description | Universal Error Name | Line Count ¹¹ |
|--|----------------------------|--------------------------|
| Documentation to support medical necessity was not submitted. | Missing/Inadequate Records | 4,654 |
| A valid provider's order, or element of an order, was not submitted. | Missing/Inadequate Orders | 2,949 |
| Valid provider's intent to order (for certain services) was not submitted. | Missing/Inadequate Orders | 2,050 |
| Documentation to support the services were provided or were provided as billed was not submitted. | Inconsistent Records | 991 |
| Documentation of result of the diagnostic or laboratory test was not submitted. | Missing/Inadequate Records | 699 |
| A signature log of medical personnel to support a clear identity of an illegible signature was not submitted or the provider's written attestation of the unsigned or illegible signature was not submitted. | Missing/Inadequate Records | 320 |

¹¹ A line can have more than one root cause for an insufficient documentation error.

Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS)

Figure 13: Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation¹²

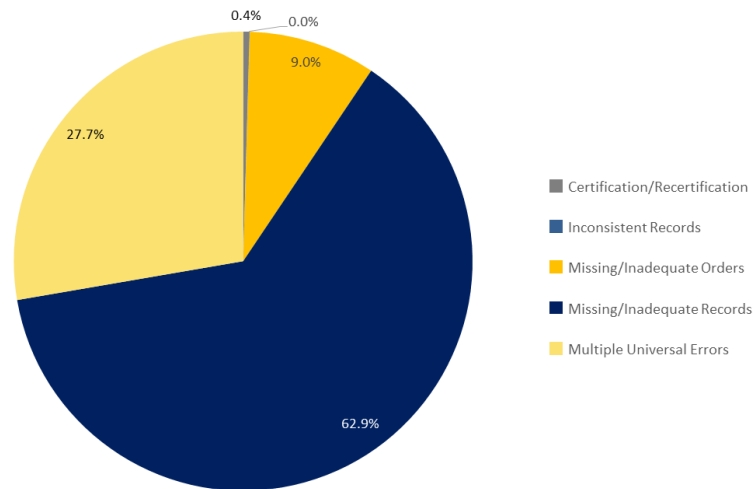
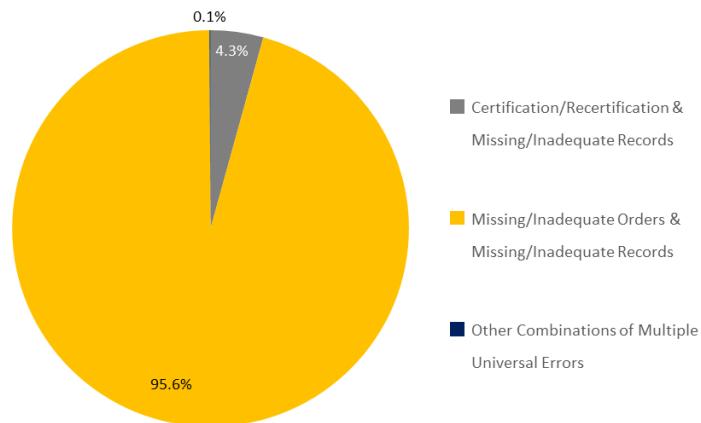


Figure 14: Multiple Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation



¹² Inconsistent Records represent less than one one-tenth percent of DMEPOS universal errors due to insufficient documentation.

Table 3: Top Root Causes of Insufficient Documentation Errors in DMEPOS

| Root Cause Description | Universal Error Name | Line Count ¹³ |
|--|----------------------------|--------------------------|
| Documentation to support medical necessity or to support the services were provided or were provided as billed was not submitted. | Missing/Inadequate Records | 2,587 |
| A valid provider's order, or element of an order, was not submitted. | Missing/Inadequate Orders | 1,797 |
| The proof of delivery, in entirety or an element, was not submitted. | Missing/Inadequate Records | 1,527 |
| Documentation to support a face-to-face examination or prescription requirements prior to delivery for certain DME items was not submitted. | Missing/Inadequate Records | 725 |
| Documentation to support medical necessity of diabetic supplies or medical necessity of high utilization of diabetic supplies was not submitted. | Missing/Inadequate Records | 315 |
| A signature log of medical personnel to support a clear identity of an illegible signature was not submitted or the provider's written attestation of the unsigned or illegible signature was not submitted. | Missing/Inadequate Records | 278 |

¹³ A line can have more than one root cause for an insufficient documentation error.

SUPPLEMENTAL STATISTICAL REPORTING

Appendix A: Summary of Projected Improper Payments Adjusted for A/B Rebill¹⁴

Table A1: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Adjusted for Impact of A/B Rebilling)

| Claim Type | Claims Sampled | Claims Reviewed | Total Payment | Projected Improper Payment | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|----------------------------------|----------------|-----------------|----------------|----------------------------|-----------------------|-------------------------|--------------------------------------|
| Part A (Total) | 29,556 | 21,979 | \$284.0 | \$18.6 | 6.5% | 6.1% - 7.0% | 58.7% |
| Part A (Excluding Hospital IPPS) | 9,768 | 8,480 | \$168.5 | \$13.6 | 8.1% | 7.3% - 8.8% | 43.0% |
| Part A (Hospital IPPS) | 19,788 | 13,499 | \$115.5 | \$5.0 | 4.3% | 3.9% - 4.7% | 15.7% |
| Part B | 17,879 | 17,037 | \$98.0 | \$10.5 | 10.7% | 9.3% - 12.0% | 33.1% |
| DMEPOS | 11,345 | 10,981 | \$7.3 | \$2.6 | 35.5% | 33.7% - 37.3% | 8.2% |
| Total | 58,780 | 49,997 | \$389.3 | \$31.6 | 8.1% | 7.6% - 8.6% | 100.0% |

Table A2: Comparison of 2017 and 2018 Overall Improper Payment Rates by Error Category (Adjusted for Impact of A/B Rebilling)

| Error Category | 2017 | 2018 | | | | |
|----------------------------|-------------|-------------|--------------------------------|----------------------|-------------|-------------|
| | Overall | Overall | Part A Excluding Hospital IPPS | Part A Hospital IPPS | Part B | DMEPOS |
| No Documentation | 0.2% | 0.2% | 0.1% | 0.0% | 0.1% | 0.0% |
| Insufficient Documentation | 6.1% | 4.7% | 2.1% | 0.3% | 1.8% | 0.5% |
| Medical Necessity | 1.7% | 1.7% | 1.0% | 0.7% | 0.1% | 0.0% |
| Incorrect Coding | 1.2% | 1.0% | 0.1% | 0.2% | 0.6% | 0.0% |
| Other | 0.3% | 0.5% | 0.2% | 0.0% | 0.1% | 0.1% |
| Total | 9.5% | 8.1% | 3.5% | 1.3% | 2.7% | 0.7% |

¹⁴ Adjusted for Medicare Part A to B rebilling of denied inpatient hospital claims.

Table A3: Improper Payment Rate Categories by Percentage of 2018 Overall Improper Payments (Adjusted for Impact of A/B Rebilling)

| Error Category | Percent of Overall Improper Payments |
|----------------------------|--------------------------------------|
| No Documentation | 2.6% |
| Insufficient Documentation | 58.0% |
| Medical Necessity | 21.3% |
| Incorrect Coding | 11.9% |
| Other | 6.3% |
| Total | 100.0% |

Table A4: Improper Payment Rates and Projected Improper Payments by Claim Type and Over/Under Payments (Dollars in Billions) (Adjusted for Impact of A/B Rebilling)

| Claim Type | Overall Improper Payments | | | Overpayments | | Underpayments | |
|----------------------------------|---------------------------|-------------------------|-----------------------|-------------------------|-----------------------|-------------------------|-----------------------|
| | Total Amount Paid | Improper Payment Amount | Improper Payment Rate | Improper Payment Amount | Improper Payment Rate | Improper Payment Amount | Improper Payment Rate |
| Part A (Total) | \$284.0 | \$18.6 | 6.5% | \$18.0 | 6.3% | \$0.6 | 0.2% |
| Part A (Excluding Hospital IPPS) | \$168.5 | \$13.6 | 8.1% | \$13.5 | 8.0% | \$0.1 | 0.0% |
| Part A(Hospital IPPS) | \$115.5 | \$5.0 | 4.3% | \$4.5 | 3.9% | \$0.5 | 0.4% |
| Part B | \$98.0 | \$10.5 | 10.7% | \$10.0 | 10.2% | \$0.5 | 0.5% |
| DMEPOS | \$7.3 | \$2.6 | 35.5% | \$2.6 | 35.5% | \$0.0 | 0.1% |
| Total | \$389.3 | \$31.6 | 8.1% | \$30.6 | 7.9% | \$1.0 | 0.3% |

Table A5: 2018 Projected Improper Payments by Type of Error and Clinical Setting (Dollars in Billions) (Adjusted for Impact of A/B Rebilling)

| Error Category | DMEPOS | Home Health Agencies | Hospital Outpatient Departments | Acute Inpatient Hospitals | Physician Services (All Settings) | Skilled Nursing Facilities | Other Clinical Settings | Overall |
|----------------------------|--------------|----------------------|---------------------------------|---------------------------|-----------------------------------|----------------------------|-------------------------|---------------|
| No Documentation | \$0.1 | \$0.1 | \$0.1 | \$0.1 | \$0.3 | \$0.1 | \$0.1 | \$0.8 |
| Insufficient Documentation | \$2.0 | \$2.0 | \$3.9 | \$1.8 | \$5.1 | \$1.8 | \$1.8 | \$18.3 |
| Medical Necessity | \$0.1 | \$0.6 | \$0.6 | \$5.1 | \$0.1 | \$0.0 | \$0.2 | \$6.7 |
| Incorrect Coding | \$0.0 | \$0.0 | \$0.3 | \$0.9 | \$2.3 | \$0.1 | \$0.2 | \$3.8 |
| Other | \$0.4 | \$0.5 | \$0.2 | \$0.1 | \$0.5 | \$0.2 | \$0.0 | \$2.0 |
| Total | \$2.6 | \$3.2 | \$5.1 | \$8.0 | \$8.3 | \$2.2 | \$2.3 | \$31.6 |

Table A6: Summary of National Improper Payment Rates by Year and by Error Category (Adjusted for Impact of A/B Rebilling)¹⁵

| Fiscal Year and Rate Type (Net/Gross) | | No Doc Errors | Insufficient Document Errors | Medical Necessity Errors | Incorrect Coding Errors | Other Errors | Improper Payment Rate | Correct Payment Rate |
|---------------------------------------|-------|---------------|------------------------------|--------------------------|-------------------------|--------------|-----------------------|----------------------|
| 1996 ¹⁶ | Net | 1.9% | 4.5% | 5.1% | 1.2% | 1.1% | 13.8% | 86.2% |
| 1997 | Net | 2.1% | 2.9% | 4.2% | 1.7% | 0.5% | 11.4% | 88.6% |
| 1998 | Net | 0.4% | 0.8% | 3.9% | 1.3% | 0.7% | 7.1% | 92.9% |
| 1999 | Net | 0.6% | 2.6% | 2.6% | 1.3% | 0.9% | 8.0% | 92.0% |
| 2000 | Net | 1.2% | 1.3% | 2.9% | 1.0% | 0.4% | 6.8% | 93.2% |
| 2001 | Net | 0.8% | 1.9% | 2.7% | 1.1% | -0.2% | 6.3% | 93.7% |
| 2002 | Net | 0.5% | 1.3% | 3.6% | 0.9% | 0.0% | 6.3% | 93.7% |
| 2003 | Net | 5.4% | 2.5% | 1.1% | 0.7% | 0.1% | 9.8% | 90.2% |
| 2004 ¹⁷ | Gross | 3.1% | 4.1% | 1.6% | 1.2% | 0.2% | 10.1% | 89.9% |
| 2005 | Gross | 0.7% | 1.1% | 1.6% | 1.5% | 0.2% | 5.2% | 94.8% |
| 2006 | Gross | 0.6% | 0.6% | 1.4% | 1.6% | 0.2% | 4.4% | 95.6% |
| 2007 | Gross | 0.6% | 0.4% | 1.3% | 1.5% | 0.2% | 3.9% | 96.1% |
| 2008 | Gross | 0.2% | 0.6% | 1.4% | 1.3% | 0.1% | 3.6% | 96.4% |
| 2009 | Gross | 0.2% | 4.3% | 6.3% | 1.5% | 0.1% | 12.4% | 87.6% |
| 2010 | Gross | 0.1% | 4.6% | 4.2% | 1.6% | 0.1% | 10.5% | 89.5% |
| 2011 ¹⁸ | Gross | 0.2% | 4.3% | 3.0% | 1.0% | 0.1% | 8.6% | 91.4% |
| 2012 ¹⁹ | Gross | 0.2% | 5.0% | 1.9% | 1.3% | 0.1% | 8.5% | 91.5% |
| 2013 | Gross | 0.2% | 6.1% | 2.2% | 1.5% | 0.2% | 10.1% | 89.9% |
| 2014 | Gross | 0.1% | 8.2% | 2.7% | 1.6% | 0.2% | 12.7% | 87.3% |
| 2015 | Gross | 0.2% | 8.1% | 2.1% | 1.3% | 0.4% | 12.1% | 87.9% |
| 2016 | Gross | 0.1% | 7.2% | 2.2% | 1.1% | 0.4% | 11.0% | 89.0% |
| 2017 | Gross | 0.2% | 6.1% | 1.7% | 1.2% | 0.3% | 9.5% | 90.5% |
| 2018 | Gross | 0.2% | 4.7% | 1.7% | 1.0% | 0.5% | 8.1% | 91.9% |

¹⁵ For purposes of this report, correct payments are considered total Medicare FFS payments minus payments considered an improper payment as identified through CERT. Please note that instances of fraud or other problems not discerned during the CERT review could still be present.

¹⁶ FY 1996-2003 improper payments were calculated as Overpayments - Underpayments

¹⁷ FY 2004-2018 improper payments were calculated as Overpayments + Underpayments

¹⁸ The FY 2011 improper payment rate reported in this table is adjusted for the prospective impact of late appeals and documentation.

¹⁹ The FY 2012-2018 improper payment rates reported in this table are adjusted for the impact of denied Part A inpatient claims under Part B.

Table A7: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Adjusted for Impact of A/B Rebilling)

| Claim Type | Claims Reviewed | Total Payment | Projected Improper Payment | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|----------------|----------------------------|-----------------------|-------------------------|--------------------------------------|
| DMEPOS | 10,981 | \$7.3 | \$2.6 | 35.5% | 33.7% - 37.3% | 8.2% |
| Home Health & Hospice | 2,099 | \$35.6 | \$5.2 | 14.7% | 13.0% - 16.3% | 16.5% |
| Parts A & B (Excluding Home Health & Hospice) | 36,917 | \$346.4 | \$23.8 | 6.9% | 6.4% - 7.4% | 75.3% |
| Total | 49,997 | \$389.3 | \$31.6 | 8.1% | 7.6% - 8.6% | 100.0% |

Appendix B: Summary of Projected Improper Payments Unadjusted for A/B Rebill

Table B1: 2018 Improper Payment Rates and Projected Improper Payments by Claim Type (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)

| Claim Type | Claims Sampled | Claims Reviewed | Total Payment | Projected Improper Payment | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|----------------------------------|----------------|-----------------|----------------|----------------------------|-----------------------|-------------------------|--------------------------------------|
| Part A (Total) | 29,556 | 21,979 | \$284.0 | \$19.2 | 6.7% | 6.3% - 7.2% | 59.5% |
| Part A (Excluding Hospital IPPS) | 9,768 | 8,480 | \$168.5 | \$13.6 | 8.1% | 7.3% - 8.8% | 42.2% |
| Part A (Hospital IPPS) | 19,788 | 13,499 | \$115.5 | \$5.5 | 4.8% | 4.4% - 5.2% | 17.2% |
| Part B | 17,879 | 17,037 | \$98.0 | \$10.5 | 10.7% | 9.3% - 12.0% | 32.5% |
| DMEPOS | 11,345 | 10,981 | \$7.3 | \$2.6 | 35.5% | 33.7% - 37.3% | 8.0% |
| Total | 58,780 | 49,997 | \$389.3 | \$32.2 | 8.3% | 7.8% - 8.7% | 100.0% |

Table B2: Comparison of 2017 and 2018 Overall Improper Payment Rates by Error Category (Unadjusted for Impact of A/B Rebilling)

| Error Category | 2017 | 2018 | | | | |
|----------------------------|-------------|-------------|--------------------------------|----------------------|-------------|-------------|
| | Overall | Overall | Part A Excluding Hospital IPPS | Part A Hospital IPPS | Part B | DMEPOS |
| No Documentation | 0.2% | 0.2% | 0.1% | 0.0% | 0.1% | 0.0% |
| Insufficient Documentation | 6.1% | 4.7% | 2.1% | 0.3% | 1.8% | 0.5% |
| Medical Necessity | 1.8% | 1.9% | 1.0% | 0.8% | 0.1% | 0.0% |
| Incorrect Coding | 1.2% | 1.0% | 0.1% | 0.2% | 0.6% | 0.0% |
| Other | 0.3% | 0.5% | 0.2% | 0.0% | 0.1% | 0.1% |
| Total | 9.6% | 8.3% | 3.5% | 1.4% | 2.7% | 0.7% |

Table B3: Improper Payment Rate Categories by Percentage of 2018 Overall Improper Payments (Unadjusted for Impact of A/B Rebilling)

| Error Category | Percent of Overall Improper Payments |
|----------------------------|--------------------------------------|
| No Documentation | 2.5% |
| Insufficient Documentation | 56.9% |
| Medical Necessity | 22.8% |
| Incorrect Coding | 11.7% |
| Other | 6.1% |
| Total | 100.0% |

Table B4: Improper Payment Rates and Projected Improper Payments by Claim Type and Over/Under Payments (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)

| Claim Type | Overall Improper Payments | | | Overpayments | | Underpayments | |
|----------------------------------|---------------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|-----------------------|
| | Total Amount Paid | Projected Improper Payments | Improper Payment Rate | Projected Improper Payments | Improper Payment Rate | Projected Improper Payments | Improper Payment Rate |
| Part A (Total) | \$284.0 | \$19.2 | 6.7% | \$18.6 | 6.5% | \$0.6 | 0.2% |
| Part A (Excluding Hospital IPPS) | \$168.5 | \$13.6 | 8.1% | \$13.5 | 8.0% | \$0.1 | 0.0% |
| Part A(Hospital IPPS) | \$115.5 | \$5.5 | 4.8% | \$5.0 | 4.4% | \$0.5 | 0.4% |
| Part B | \$98.0 | \$10.5 | 10.7% | \$10.0 | 10.2% | \$0.5 | 0.5% |
| DMEPOS | \$7.3 | \$2.6 | 35.5% | \$2.6 | 35.5% | \$0.0 | 0.1% |
| Total | \$389.3 | \$32.2 | 8.3% | \$31.2 | 8.0% | \$1.0 | 0.3% |

Table B5: 2018 Projected Improper Payments by Type of Error and Clinical Setting (Dollars in Billions) (Unadjusted for Impact of A/B Rebilling)

| Error Category | DMEPOS | Home Health Agencies | Hospital Outpatient Departments | Acute Inpatient Hospitals | Physician Services (All Settings) | Skilled Nursing Facilities | Other Clinical Settings | Overall |
|----------------------------|--------------|----------------------|---------------------------------|---------------------------|-----------------------------------|----------------------------|-------------------------|---------------|
| No Documentation | \$0.1 | \$0.1 | \$0.2 | \$0.1 | \$0.3 | \$0.1 | \$0.1 | \$0.8 |
| Insufficient Documentation | \$2.0 | \$2.0 | \$3.9 | \$1.8 | \$5.1 | \$1.8 | \$1.8 | \$18.3 |
| Medical Necessity | \$0.1 | \$0.6 | \$0.6 | \$5.7 | \$0.1 | \$0.0 | \$0.2 | \$7.3 |
| Incorrect Coding | \$0.0 | \$0.0 | \$0.3 | \$0.9 | \$2.3 | \$0.1 | \$0.2 | \$3.8 |
| Other | \$0.4 | \$0.5 | \$0.2 | \$0.1 | \$0.5 | \$0.2 | \$0.0 | \$2.0 |
| Total | \$2.6 | \$3.2 | \$5.1 | \$8.6 | \$8.3 | \$2.2 | \$2.3 | \$32.2 |

Table B6: Summary of National Improper Payment Rates by Year and by Error Category (Unadjusted for Impact of A/B Rebilling)²⁰

| Fiscal Year and Rate Type (Net/Gross) | | No Doc Errors | Insufficient Document Errors | Medical Necessity Errors | Incorrect Coding Errors | Other Errors | Improper Payment Rate | Correct Payment Rate |
|---------------------------------------|-------|---------------|------------------------------|--------------------------|-------------------------|--------------|-----------------------|----------------------|
| 1996 ²¹ | Net | 1.9% | 4.5% | 5.1% | 1.2% | 1.1% | 13.8% | 86.2% |
| 1997 | Net | 2.1% | 2.9% | 4.2% | 1.7% | 0.5% | 11.4% | 88.6% |
| 1998 | Net | 0.4% | 0.8% | 3.9% | 1.3% | 0.7% | 7.1% | 92.9% |
| 1999 | Net | 0.6% | 2.6% | 2.6% | 1.3% | 0.9% | 8.0% | 92.0% |
| 2000 | Net | 1.2% | 1.3% | 2.9% | 1.0% | 0.4% | 6.8% | 93.2% |
| 2001 | Net | 0.8% | 1.9% | 2.7% | 1.1% | -0.2% | 6.3% | 93.7% |
| 2002 | Net | 0.5% | 1.3% | 3.6% | 0.9% | 0.0% | 6.3% | 93.7% |
| 2003 | Net | 5.4% | 2.5% | 1.1% | 0.7% | 0.1% | 9.8% | 90.2% |
| 2004 ²² | Gross | 3.1% | 4.1% | 1.6% | 1.2% | 0.2% | 10.1% | 89.9% |
| 2005 | Gross | 0.7% | 1.1% | 1.6% | 1.5% | 0.2% | 5.2% | 94.8% |
| 2006 | Gross | 0.6% | 0.6% | 1.4% | 1.6% | 0.2% | 4.4% | 95.6% |
| 2007 | Gross | 0.6% | 0.4% | 1.3% | 1.5% | 0.2% | 3.9% | 96.1% |
| 2008 | Gross | 0.2% | 0.6% | 1.4% | 1.3% | 0.1% | 3.6% | 96.4% |
| 2009 | Gross | 0.2% | 4.3% | 6.3% | 1.5% | 0.1% | 12.4% | 87.6% |
| 2010 | Gross | 0.1% | 4.6% | 4.2% | 1.6% | 0.1% | 10.5% | 89.5% |
| 2011 | Gross | 0.2% | 5.0% | 3.4% | 1.2% | 0.1% | 9.9% | 90.1% |
| 2012 | Gross | 0.2% | 5.0% | 2.6% | 1.3% | 0.1% | 9.3% | 90.7% |
| 2013 | Gross | 0.2% | 6.1% | 2.8% | 1.5% | 0.2% | 10.7% | 89.3% |
| 2014 | Gross | 0.1% | 8.2% | 3.6% | 1.6% | 0.2% | 13.6% | 86.4% |
| 2015 | Gross | 0.2% | 8.2% | 2.5% | 1.3% | 0.4% | 12.5% | 87.5% |
| 2016 | Gross | 0.1% | 7.2% | 2.4% | 1.1% | 0.4% | 11.2% | 88.8% |
| 2017 | Gross | 0.2% | 6.1% | 1.8% | 1.2% | 0.3% | 9.6% | 90.4% |
| 2018 | Gross | 0.2% | 4.7% | 1.9% | 1.0% | 0.5% | 8.3% | 91.7% |

²⁰ For purposes of this report, correct payments are considered total Medicare FFS payments minus payments considered an improper payment as identified through CERT. Please note that instances of fraud or other problems not discerned during the CERT review could still be present.

²¹ FY 1996-2003 improper payments were calculated as Overpayments - Underpayments

²² FY 2004-2018 improper payments were calculated as Overpayments + absolute value of Underpayments

Table B7: Projected Improper Payments by Length of Stay (Unadjusted for Impact of A/B Rebilling)

| Part A (Hospital IPPS) Length of Stay | Claims Reviewed | Improper Payment Rate | Projected Improper Payment | Percent of Overall Improper Payments |
|---------------------------------------|-----------------|-----------------------|----------------------------|--------------------------------------|
| Medicare FFS | 49,997 | 8.3% | \$32.2 | 100.0% |
| Overall Part A(Hospital IPPS) | 13,499 | 4.8% | \$5.5 | 17.2% |
| 0 or 1 day | 1,511 | 17.0% | \$1.3 | 4.1% |
| 2 days | 2,129 | 6.3% | \$0.9 | 2.9% |
| 3 days | 2,199 | 5.0% | \$0.8 | 2.5% |
| 4 days | 1,715 | 4.1% | \$0.5 | 1.6% |
| 5 days | 1,201 | 4.4% | \$0.4 | 1.3% |
| More than 5 days | 4,744 | 2.8% | \$1.6 | 4.8% |

Table B8: Medicare FFS Projected Improper Payments by State (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling)

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|-------|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| TX | 3,607 | \$3,515.6 | 12.7% | 10.6% - 14.8% | 10.9% |
| CA | 4,227 | \$2,944.5 | 7.7% | 6.5% - 9.0% | 9.1% |
| FL | 3,585 | \$2,582.6 | 9.4% | 6.0% - 12.8% | 8.0% |
| OH | 1,977 | \$1,972.2 | 13.0% | 8.7% - 17.3% | 6.1% |
| NY | 2,702 | \$1,394.5 | 5.8% | 4.7% - 7.0% | 4.3% |
| PA | 2,149 | \$1,354.6 | 7.9% | 6.1% - 9.8% | 4.2% |
| GA | 1,575 | \$1,229.1 | 13.4% | 10.3% - 16.4% | 3.8% |
| NJ | 1,543 | \$1,202.1 | 8.8% | 6.4% - 11.3% | 3.7% |
| IL | 2,067 | \$1,121.8 | 7.1% | 5.7% - 8.6% | 3.5% |
| MI | 1,803 | \$1,008.8 | 8.1% | 6.2% - 9.9% | 3.1% |
| KY | 924 | \$902.6 | 14.0% | 9.4% - 18.5% | 2.8% |
| NC | 1,870 | \$901.7 | 7.3% | 5.0% - 9.6% | 2.8% |
| VA | 1,202 | \$781.9 | 8.0% | 5.3% - 10.8% | 2.4% |
| MD | 1,151 | \$764.5 | 7.4% | 5.4% - 9.4% | 2.4% |
| AL | 1,020 | \$744.5 | 12.3% | 9.1% - 15.4% | 2.3% |
| TN | 1,416 | \$719.5 | 6.4% | 4.4% - 8.4% | 2.2% |
| IN | 1,188 | \$697.1 | 8.1% | 5.5% - 10.7% | 2.2% |
| LA | 851 | \$611.9 | 8.1% | 4.7% - 11.6% | 1.9% |
| MA | 1,452 | \$573.9 | 4.5% | 3.3% - 5.7% | 1.8% |
| KS | 563 | \$545.9 | 12.1% | 5.1% - 19.1% | 1.7% |
| SC | 829 | \$540.0 | 9.4% | 6.4% - 12.4% | 1.7% |
| AZ | 846 | \$472.6 | 8.3% | 5.9% - 10.7% | 1.5% |

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|-------------------|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| OK | 723 | \$458.5 | 9.7% | 6.4% - 13.0% | 1.4% |
| MO | 1,094 | \$422.4 | 6.6% | 4.8% - 8.4% | 1.3% |
| AR | 556 | \$421.2 | 9.4% | 5.3% - 13.4% | 1.3% |
| WA | 895 | \$417.4 | 4.8% | 2.8% - 6.9% | 1.3% |
| MN | 787 | \$369.7 | 5.5% | 3.4% - 7.5% | 1.2% |
| CO | 645 | \$366.8 | 8.2% | 4.9% - 11.5% | 1.1% |
| NV | 408 | \$362.6 | 12.1% | 6.6% - 17.5% | 1.1% |
| MS | 685 | \$323.6 | 6.1% | 3.6% - 8.6% | 1.0% |
| IA | 535 | \$320.3 | 8.9% | 4.8% - 13.0% | 1.0% |
| NE | 313 | \$252.2 | 8.5% | 4.4% - 12.6% | 0.8% |
| WI | 787 | \$244.4 | 4.8% | 2.9% - 6.8% | 0.8% |
| CT | 561 | \$242.0 | 4.7% | 2.1% - 7.2% | 0.8% |
| UT | 297 | \$209.3 | 10.2% | 4.0% - 16.3% | 0.7% |
| WV | 357 | \$187.8 | 7.4% | 3.5% - 11.4% | 0.6% |
| SD | 203 | \$133.3 | 11.0% | 2.9% - 19.1% | 0.4% |
| NM | 260 | \$112.8 | 6.4% | 3.2% - 9.6% | 0.4% |
| DE | 198 | \$102.9 | 7.7% | 1.9% - 13.5% | 0.3% |
| ND | 156 | \$94.5 | 6.6% | (3.0%) - 16.2% | 0.3% |
| OR | 391 | \$89.6 | 3.2% | 2.0% - 4.4% | 0.3% |
| ME | 279 | \$70.3 | 4.1% | 1.9% - 6.4% | 0.2% |
| PR | 73 | \$68.2 | 16.2% | 4.4% - 28.0% | 0.2% |
| NH | 287 | \$61.2 | 2.0% | 0.6% - 3.3% | 0.2% |
| ID | 220 | \$55.5 | 4.8% | 1.3% - 8.2% | 0.2% |
| WY | 77 | \$44.7 | 10.0% | 0.5% - 19.6% | 0.1% |
| RI | 152 | \$39.7 | 2.8% | 0.7% - 4.9% | 0.1% |
| DC | 78 | \$39.6 | 5.2% | (1.0%) - 11.4% | 0.1% |
| MT | 156 | \$39.5 | 1.3% | (0.6%) - 3.1% | 0.1% |
| HI | 94 | \$38.5 | 4.6% | (1.2%) - 10.3% | 0.1% |
| AK | 46 | \$17.6 | 4.9% | (0.3%) - 10.2% | 0.1% |
| VT | 114 | \$13.2 | 1.9% | (0.2%) - 4.0% | 0.0% |
| All States | 49,997 | \$32,211.2 | 8.3% | 7.8% - 8.7% | 100.0% |

Table B9: Medicare FFS Projected Improper Payments by State – Parts A & B (Excluding Home Health and Hospice) (Dollars in Millions) (Unadjusted for Impact of A/B Rebilling)

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|-------|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| TX | 2,685 | \$2,596.0 | 11.0% | 8.7% - 13.3% | 8.1% |
| CA | 3,200 | \$2,224.9 | 6.8% | 5.5% - 8.1% | 6.9% |
| FL | 2,687 | \$1,889.3 | 8.0% | 4.2% - 11.9% | 5.9% |
| OH | 1,411 | \$1,516.9 | 11.7% | 6.8% - 16.6% | 4.7% |
| NJ | 1,151 | \$1,092.1 | 8.7% | 6.1% - 11.2% | 3.4% |
| PA | 1,585 | \$1,080.2 | 7.0% | 5.1% - 8.8% | 3.4% |
| NY | 2,057 | \$1,016.9 | 4.6% | 3.5% - 5.6% | 3.2% |
| GA | 1,185 | \$957.2 | 12.2% | 9.1% - 15.3% | 3.0% |
| NC | 1,397 | \$738.8 | 6.7% | 4.2% - 9.1% | 2.3% |
| IL | 1,482 | \$730.8 | 5.3% | 4.0% - 6.5% | 2.3% |
| KY | 656 | \$718.0 | 12.2% | 7.5% - 16.9% | 2.2% |
| MI | 1,342 | \$716.1 | 6.5% | 4.8% - 8.2% | 2.2% |
| AL | 741 | \$624.7 | 12.1% | 8.7% - 15.5% | 1.9% |
| MD | 882 | \$617.7 | 6.4% | 4.4% - 8.3% | 1.9% |
| VA | 836 | \$575.8 | 6.7% | 3.9% - 9.4% | 1.8% |
| TN | 1,125 | \$574.1 | 5.5% | 3.5% - 7.5% | 1.8% |
| IN | 831 | \$504.3 | 6.4% | 3.9% - 8.9% | 1.6% |
| MA | 1,204 | \$468.6 | 4.0% | 2.8% - 5.1% | 1.5% |
| LA | 582 | \$456.7 | 7.4% | 3.6% - 11.1% | 1.4% |
| KS | 409 | \$452.9 | 11.0% | 3.5% - 18.4% | 1.4% |
| AZ | 664 | \$385.4 | 8.0% | 5.4% - 10.6% | 1.2% |
| SC | 607 | \$381.6 | 7.4% | 4.6% - 10.2% | 1.2% |
| AR | 389 | \$346.0 | 8.3% | 4.2% - 12.4% | 1.1% |
| MO | 787 | \$329.9 | 5.8% | 4.0% - 7.6% | 1.0% |
| NV | 298 | \$325.0 | 12.7% | 6.4% - 19.0% | 1.0% |
| CO | 452 | \$277.0 | 6.8% | 3.7% - 10.0% | 0.9% |
| WA | 673 | \$276.7 | 3.4% | 1.8% - 5.1% | 0.9% |
| MN | 596 | \$260.2 | 4.2% | 2.3% - 6.1% | 0.8% |
| OK | 509 | \$231.6 | 6.2% | 3.6% - 8.8% | 0.7% |
| IA | 381 | \$230.5 | 6.9% | 3.0% - 10.7% | 0.7% |
| MS | 484 | \$221.5 | 4.6% | 2.4% - 6.8% | 0.7% |
| NE | 204 | \$194.8 | 7.4% | 3.3% - 11.5% | 0.6% |
| CT | 403 | \$188.8 | 4.0% | 1.3% - 6.6% | 0.6% |
| WI | 551 | \$181.1 | 4.1% | 2.0% - 6.2% | 0.6% |
| WV | 248 | \$130.4 | 5.6% | 1.8% - 9.4% | 0.4% |

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|-------------------|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| SD | 154 | \$92.7 | 8.4% | 0.7% - 16.2% | 0.3% |
| ND | 121 | \$92.5 | 6.6% | (3.2%) - 16.5% | 0.3% |
| DE | 142 | \$89.9 | 7.6% | 1.2% - 14.1% | 0.3% |
| UT | 209 | \$87.8 | 5.2% | 1.3% - 9.1% | 0.3% |
| NM | 173 | \$80.4 | 5.0% | 1.9% - 8.0% | 0.3% |
| OR | 277 | \$70.4 | 3.0% | 1.6% - 4.3% | 0.2% |
| ID | 155 | \$50.4 | 4.9% | 1.1% - 8.7% | 0.2% |
| PR | 54 | \$47.4 | 16.4% | 2.5% - 30.3% | 0.2% |
| NH | 220 | \$43.0 | 1.5% | 0.2% - 2.7% | 0.1% |
| DC | 56 | \$38.5 | 5.3% | (1.1%) - 11.7% | 0.1% |
| HI | 69 | \$36.3 | 4.7% | (1.5%) - 10.8% | 0.1% |
| RI | 112 | \$34.1 | 2.8% | 0.5% - 5.1% | 0.1% |
| ME | 196 | \$33.3 | 2.2% | 0.6% - 3.9% | 0.1% |
| MT | 109 | \$31.3 | 1.0% | (0.5%) - 2.6% | 0.1% |
| WY | 41 | \$29.2 | 7.0% | (0.8%) - 14.7% | 0.1% |
| AK | 33 | \$17.5 | 4.9% | (0.3%) - 10.2% | 0.1% |
| VT | 83 | \$9.8 | 1.5% | (0.6%) - 3.6% | 0.0% |
| All States | 36,917 | \$24,407.2 | 7.1% | 6.5% - 7.5% | 75.8% |

**Table B10: Medicare FFS Projected Improper Payments by State – DMEPOS Only
(Dollars in Millions) (Unadjusted for Impact of A/B Rebidding)**

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|-------|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| CA | 831 | \$221.0 | 36.6% | 29.0% - 44.1% | 0.7% |
| FL | 728 | \$219.8 | 41.4% | 35.0% - 47.8% | 0.7% |
| TX | 684 | \$164.5 | 34.5% | 28.6% - 40.3% | 0.5% |
| NY | 572 | \$124.0 | 38.8% | 31.6% - 46.1% | 0.4% |
| IL | 485 | \$118.1 | 37.7% | 30.8% - 44.6% | 0.4% |
| OH | 446 | \$113.3 | 37.3% | 26.0% - 48.6% | 0.4% |
| NC | 423 | \$104.0 | 36.7% | 27.8% - 45.7% | 0.3% |
| PA | 485 | \$100.7 | 36.6% | 29.0% - 44.1% | 0.3% |
| MI | 390 | \$99.5 | 43.5% | 35.6% - 51.5% | 0.3% |
| IN | 317 | \$87.3 | 42.5% | 31.0% - 54.0% | 0.3% |
| NJ | 349 | \$85.7 | 41.6% | 32.1% - 51.1% | 0.3% |
| GA | 318 | \$82.6 | 37.8% | 28.6% - 47.0% | 0.3% |
| KY | 243 | \$81.5 | 50.0% | 36.9% - 63.1% | 0.3% |
| TN | 251 | \$70.3 | 37.2% | 27.8% - 46.6% | 0.2% |
| MD | 249 | \$63.0 | 40.0% | 30.4% - 49.6% | 0.2% |
| MS | 178 | \$52.9 | 40.7% | 30.0% - 51.4% | 0.2% |
| MO | 272 | \$52.1 | 28.0% | 20.2% - 35.7% | 0.2% |
| VA | 304 | \$50.8 | 25.0% | 15.3% - 34.7% | 0.2% |
| LA | 187 | \$48.9 | 40.1% | 28.3% - 51.9% | 0.2% |
| MA | 202 | \$44.8 | 36.0% | 24.5% - 47.6% | 0.1% |
| SC | 193 | \$44.2 | 37.8% | 23.6% - 52.1% | 0.1% |
| AL | 230 | \$43.4 | 29.6% | 21.5% - 37.6% | 0.1% |
| WA | 192 | \$40.0 | 30.7% | 19.7% - 41.8% | 0.1% |
| OK | 163 | \$37.8 | 21.5% | 6.2% - 36.9% | 0.1% |
| CO | 171 | \$35.7 | 32.8% | 19.4% - 46.2% | 0.1% |
| MN | 157 | \$35.5 | 49.1% | 35.1% - 63.1% | 0.1% |
| AR | 149 | \$34.3 | 33.9% | 22.7% - 45.0% | 0.1% |
| WI | 211 | \$29.9 | 24.3% | 13.3% - 35.4% | 0.1% |
| WV | 100 | \$29.0 | 27.5% | 3.1% - 51.8% | 0.1% |
| IA | 139 | \$27.8 | 34.2% | 18.4% - 50.0% | 0.1% |
| NE | 94 | \$27.5 | 45.1% | 27.1% - 63.1% | 0.1% |
| CT | 137 | \$26.7 | 33.9% | 22.1% - 45.7% | 0.1% |
| KS | 133 | \$22.8 | 25.4% | 14.3% - 36.5% | 0.1% |
| AZ | 141 | \$22.2 | 21.4% | 10.9% - 31.8% | 0.1% |
| NM | 78 | \$21.8 | 49.2% | 32.8% - 65.5% | 0.1% |

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| NV | 90 | \$20.3 | 32.9% | 19.5% - 46.2% | 0.1% |
| ME | 72 | \$19.4 | 42.0% | 25.3% - 58.7% | 0.1% |
| OR | 94 | \$16.9 | 31.6% | 16.9% - 46.4% | 0.1% |
| NH | 60 | \$13.4 | 35.5% | 18.9% - 52.1% | 0.0% |
| DE | 50 | \$13.0 | 44.2% | 25.9% - 62.4% | 0.0% |
| UT | 73 | \$10.4 | 14.3% | (0.6%) - 29.1% | 0.0% |
| MT | 45 | \$8.2 | 29.9% | 13.8% - 46.0% | 0.0% |
| WY | 35 | \$5.8 | 34.1% | 12.6% - 55.6% | 0.0% |
| ID | 60 | \$5.0 | 12.2% | 2.4% - 22.0% | 0.0% |
| SD | 43 | \$3.2 | 14.3% | 1.2% - 27.4% | 0.0% |
| ND | 34 | \$2.0 | 11.3% | (1.2%) - 23.8% | 0.0% |
| All States (Incl. States Not Listed) | 10,981 | \$2,588.3 | 35.5% | 33.7% - 37.3% | 8.0% |

Table B11: Medicare FFS Projected Improper Payments by State – Home Health and Hospice Only (Dollars in Millions) (Unadjusted for Impact of A/B Rebidding)

| State | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| TX | 238 | \$755.1 | 21.2% | 15.8% - 26.6% | 2.3% |
| CA | 196 | \$498.6 | 10.8% | 6.5% - 15.2% | 1.6% |
| FL | 170 | \$473.4 | 14.3% | 8.9% - 19.7% | 1.5% |
| OH | 120 | \$342.0 | 17.3% | 9.7% - 24.9% | 1.1% |
| IL | 100 | \$272.9 | 18.4% | 9.7% - 27.0% | 0.9% |
| NY | 73 | \$253.7 | 19.2% | 9.2% - 29.1% | 0.8% |
| MI | 71 | \$193.2 | 16.2% | 6.2% - 26.1% | 0.6% |
| GA | 72 | \$189.3 | 17.0% | 5.9% - 28.1% | 0.6% |
| OK | 51 | \$189.2 | 23.4% | 10.6% - 36.3% | 0.6% |
| PA | 79 | \$173.8 | 13.2% | 4.3% - 22.0% | 0.5% |
| VA | 62 | \$155.3 | 17.8% | 7.8% - 27.7% | 0.5% |
| LA | 82 | \$106.3 | 9.0% | 2.9% - 15.0% | 0.3% |
| IN | 40 | \$105.5 | 21.6% | 7.4% - 35.7% | 0.3% |
| AL | 49 | \$76.5 | 9.9% | 0.0% - 19.8% | 0.2% |
| TN | 40 | \$75.1 | 11.2% | 2.7% - 19.8% | 0.2% |
| MN | 34 | \$73.9 | 15.4% | 1.9% - 28.9% | 0.2% |
| AZ | 41 | \$65.0 | 8.3% | 0.8% - 15.8% | 0.2% |
| MA | 46 | \$60.5 | 6.9% | (1.1%) - 15.0% | 0.2% |
| NC | 50 | \$58.9 | 6.1% | (0.2%) - 12.4% | 0.2% |
| MO | 35 | \$40.4 | 8.3% | (0.0%) - 16.7% | 0.1% |
| NJ | 43 | \$24.3 | 3.1% | (2.4%) - 8.7% | 0.1% |
| All States (Incl. States Not Listed) | 2,099 | \$5,215.7 | 14.7% | 13.0% - 16.3% | 16.2% |

Appendix C: Medicare Access and CHIP Reauthorization Act of 2015 Section 517 Reporting

Table C1: Services Paid under the Physician Fee Schedule (PFS) in which the Fee Schedule Amount is in Excess of \$250 and the Improper Payment Rate is in Excess of 20 Percent

There were no services that had an improper payment rate that was in excess of 20 percent that also had a physician fee schedule amount greater than \$250.

Appendix D: Projected Improper Payments and Type of Error by Type of Service for Each Claim Type

This series of tables is sorted in descending order by projected improper payments. All estimates in these tables are based on a minimum of 30 lines in the sample. For a full listing of all services with 30 or more claims, see Appendix G.

Table D1: Top 20 Service Types with Highest Improper Payments: Part B

| Part B Services (BETOS Codes) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------------|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Other drugs | \$1,092,458,318 | 9.1% | (0.1%) - 18.4% | 0.0% | 65.8% | 0.0% | 1.1% | 33.2% | 3.4% |
| Office visits - established | \$1,050,386,680 | 7.1% | 6.0% - 8.2% | 5.7% | 24.5% | 2.0% | 66.4% | 1.5% | 3.3% |
| Lab tests - other (non-Medicare fee schedule) | \$981,823,792 | 29.8% | 25.7% - 33.9% | 0.6% | 93.7% | 4.7% | 0.0% | 1.0% | 3.0% |
| Hospital visit - subsequent | \$767,051,514 | 14.2% | 12.4% - 16.0% | 10.4% | 41.3% | 0.0% | 48.4% | 0.0% | 2.4% |
| Hospital visit - initial | \$688,320,885 | 24.6% | 22.6% - 26.7% | 3.3% | 30.3% | 0.0% | 66.4% | 0.0% | 2.1% |
| Ambulance | \$599,536,134 | 13.4% | 10.2% - 16.6% | 0.0% | 68.9% | 23.8% | 5.4% | 1.9% | 1.9% |
| Minor procedures - other (Medicare fee schedule) | \$587,274,834 | 15.0% | 11.9% - 18.1% | 1.9% | 91.6% | 2.4% | 3.7% | 0.4% | 1.8% |
| Minor procedures - musculoskeletal | \$392,674,133 | 29.1% | 15.9% - 42.3% | 0.0% | 86.7% | 13.3% | 0.0% | 0.0% | 1.2% |
| Nursing home visit | \$355,453,205 | 18.2% | 14.5% - 21.8% | 11.5% | 32.1% | 0.0% | 47.5% | 8.9% | 1.1% |
| Office visits - new | \$344,549,782 | 12.7% | 10.5% - 14.9% | 0.0% | 10.9% | 0.0% | 86.0% | 3.1% | 1.1% |
| Specialist - other | \$294,693,195 | 27.2% | 17.8% - 36.6% | 3.5% | 94.1% | 0.4% | 2.0% | 0.0% | 0.9% |
| Specialist - psychiatry | \$293,503,840 | 26.3% | 18.3% - 34.3% | 2.5% | 90.3% | 0.0% | 0.8% | 6.3% | 0.9% |
| Chiropractic | \$260,878,720 | 41.0% | 34.5% - 47.5% | 0.0% | 88.3% | 7.7% | 4.0% | 0.0% | 0.8% |
| Other tests - other | \$246,371,070 | 13.4% | 7.5% - 19.3% | 5.9% | 91.1% | 0.3% | 2.7% | 0.0% | 0.8% |
| Emergency room visit | \$238,537,192 | 11.3% | 9.4% - 13.3% | 0.0% | 5.8% | 0.0% | 94.2% | 0.0% | 0.7% |
| Hospital visit - critical care | \$197,877,373 | 19.7% | 15.0% - 24.3% | 5.4% | 39.8% | 0.0% | 54.6% | 0.2% | 0.6% |
| Ambulatory procedures - other | \$142,495,895 | 17.9% | 9.2% - 26.6% | 1.1% | 98.8% | 0.0% | 0.0% | 0.1% | 0.4% |
| Advanced imaging - CAT/CT/CTA: other | \$133,362,254 | 12.9% | 5.3% - 20.5% | 0.0% | 96.5% | 0.0% | 0.0% | 3.5% | 0.4% |
| Oncology - radiation therapy | \$112,699,466 | 10.3% | (2.2%) - 22.7% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.3% |
| Eye procedure - cataract removal/lens insertion | \$111,630,382 | 6.6% | 1.0% - 12.2% | 0.0% | 96.8% | 0.0% | 0.1% | 3.1% | 0.3% |
| All Type of Services (Incl. Codes Not Listed) | \$10,472,333,004 | 10.7% | 9.3% - 12.0% | 3.4% | 65.2% | 3.1% | 23.6% | 4.7% | 32.5% |

Table D2: Top 20 Service Types with Highest Improper Payments: DMEPOS

| DMEPOS (TOS) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------------|-----------------------|-------------------------|---|------------------|-------------------|------------------|--------------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Oxygen Supplies/Equipment | \$290,625,427 | 42.4% | 38.8% - 46.0% | 5.8% | 82.3% | 0.3% | 0.0% | 11.6% | 0.9% |
| CPAP | \$253,477,201 | 41.4% | 36.7% - 46.1% | 2.0% | 87.9% | 0.1% | 0.1% | 10.0% | 0.8% |
| Lower Limb Orthoses | \$235,220,363 | 60.3% | 50.2% - 70.3% | 0.4% | 84.7% | 5.8% | 0.0% | 9.0% | 0.7% |
| Surgical Dressings | \$157,037,254 | 69.2% | 59.3% - 79.1% | 1.0% | 85.0% | 0.2% | 0.0% | 13.7% | 0.5% |
| Infusion Pumps & Related Drugs | \$138,108,379 | 21.9% | 15.0% - 28.9% | 1.4% | 72.9% | 2.0% | 0.2% | 23.4% | 0.4% |
| LSO | \$132,114,273 | 46.1% | 38.5% - 53.7% | 8.1% | 63.3% | 6.3% | 0.0% | 22.3% | 0.4% |
| Nebulizers & Related Drugs | \$107,191,438 | 15.2% | 12.0% - 18.5% | 5.8% | 83.8% | 1.8% | 0.0% | 8.6% | 0.3% |
| Diabetic Shoes | \$104,817,113 | 73.2% | 64.3% - 82.0% | 3.9% | 82.3% | 0.0% | 0.0% | 13.8% | 0.3% |
| Ostomy Supplies | \$92,491,689 | 40.3% | 33.3% - 47.3% | 2.3% | 81.6% | 1.9% | 0.1% | 14.1% | 0.3% |
| Ventilators | \$91,386,597 | 29.6% | 24.9% - 34.2% | 4.1% | 70.3% | 3.7% | 0.0% | 21.9% | 0.3% |
| Immunosuppressive Drugs | \$91,238,292 | 30.8% | 22.2% - 39.5% | 7.8% | 68.3% | 1.0% | 0.8% | 22.0% | 0.3% |
| Upper Limb Orthoses | \$80,974,522 | 50.8% | 40.4% - 61.2% | 3.0% | 77.1% | 6.9% | 0.0% | 12.9% | 0.3% |
| Glucose Monitor | \$78,872,471 | 45.6% | 38.3% - 52.8% | 4.6% | 64.4% | 7.7% | 9.4% | 13.8% | 0.2% |
| All Policy Groups with Less than 30 Claims | \$75,101,927 | 53.8% | 39.2% - 68.5% | 1.8% | 79.1% | 10.3% | 0.0% | 8.8% | 0.2% |
| Urological Supplies | \$72,218,279 | 26.1% | 19.0% - 33.1% | 2.6% | 62.7% | 2.1% | 0.2% | 32.3% | 0.2% |
| Enteral Nutrition | \$68,113,376 | 40.2% | 32.7% - 47.7% | 3.1% | 66.3% | 0.5% | 0.1% | 29.9% | 0.2% |
| Lower Limb Prostheses | \$46,603,468 | 11.1% | 4.7% - 17.5% | 3.8% | 95.8% | 0.0% | 0.2% | 0.2% | 0.1% |
| Wheelchairs Manual | \$42,782,208 | 58.1% | 41.4% - 74.7% | 4.4% | 85.9% | 2.5% | 0.0% | 7.2% | 0.1% |
| Parenteral Nutrition | \$41,818,030 | 21.6% | 13.3% - 29.8% | 2.7% | 76.9% | 0.0% | 0.5% | 19.9% | 0.1% |
| Wheelchairs Options/Accessories | \$37,949,391 | 30.6% | 15.0% - 46.2% | 13.2% | 81.3% | 0.2% | 1.5% | 3.8% | 0.1% |
| All Type of Services (Incl. Codes Not Listed) | \$2,588,252,739 | 35.5% | 33.7% - 37.3% | 3.5% | 78.1% | 2.5% | 0.4% | 15.5% | 8.0% |

Table D3: Top Service Types with Highest Improper Payments: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------------|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Home Health | \$3,159,762,318 | 17.6% | 15.3% - 20.0% | 2.0% | 61.9% | 19.3% | 0.5% | 16.2% | 9.8% |
| Hospital Inpatient (Part A) | \$3,028,843,725 | 27.5% | 23.4% - 31.5% | 0.1% | 17.0% | 82.9% | 0.0% | 0.0% | 9.4% |
| SNF Inpatient | \$2,148,184,957 | 7.0% | 5.4% - 8.6% | 2.4% | 81.3% | 1.7% | 4.1% | 10.5% | 6.7% |
| Hospital Outpatient | \$2,054,966,891 | 3.1% | 2.3% - 4.0% | 2.1% | 85.5% | 1.4% | 3.1% | 7.8% | 6.4% |
| Nonhospital based hospice | \$1,780,099,205 | 11.0% | 8.6% - 13.3% | 5.2% | 56.6% | 28.3% | 9.8% | 0.2% | 5.5% |
| Clinic ESRD | \$394,644,185 | 3.5% | 2.1% - 5.0% | 0.0% | 99.6% | 0.0% | 0.0% | 0.4% | 1.2% |
| Critical Access Hospital | \$386,619,186 | 6.1% | 2.8% - 9.5% | 0.0% | 88.4% | 8.4% | 2.3% | 0.9% | 1.2% |
| Hospital based hospice | \$275,887,344 | 19.3% | 12.6% - 25.9% | 1.1% | 83.4% | 1.4% | 14.1% | 0.1% | 0.9% |
| Hospital Other Part B | \$133,323,795 | 16.2% | 6.2% - 26.2% | 1.0% | 77.7% | 0.0% | 0.2% | 21.0% | 0.4% |
| SNF Inpatient Part B | \$69,041,788 | 2.3% | 0.5% - 4.1% | 0.0% | 69.6% | 9.2% | 18.1% | 3.1% | 0.2% |
| All Codes With Less Than 30 Claims | \$51,021,678 | 89.2% | 67.9% -110.4% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.2% |
| Clinic OPT | \$50,728,222 | 8.6% | (0.2%) - 17.3% | 0.0% | 63.3% | 0.0% | 0.7% | 36.0% | 0.2% |
| RHCs | \$38,030,705 | 3.0% | 0.7% - 5.3% | 17.4% | 70.6% | 0.0% | 0.0% | 12.0% | 0.1% |
| FQHC | \$17,783,129 | 1.6% | (1.5%) - 4.7% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| Clinic CORF | \$6,229,586 | 25.5% | 9.5% - 41.4% | 0.0% | 91.1% | 0.0% | 0.9% | 8.0% | 0.0% |
| Hospital Inpatient Part B | \$3,958,361 | 0.4% | 0.0% - 0.8% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| SNF Outpatient | \$3,175,420 | 1.4% | (0.6%) - 3.4% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| All Type of Services (Incl. Codes Not Listed) | \$13,602,300,496 | 8.1% | 7.3% - 8.8% | 1.9% | 60.6% | 27.4% | 3.0% | 7.1% | 42.2% |

Table D4: Top 20 Service Types with Highest Improper Payments: Part A Hospital IPPS

| Part A Hospital IPPS Services (MS-DRGs) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Psychoses (885) | \$461,746,775 | 13.2% | 9.9% - 16.5% | 0.0% | 60.0% | 30.9% | 0.2% | 8.9% | 1.4% |
| Major Joint Replacement Or Reattachment Of Lower Extremity (469, 470) | \$348,336,657 | 5.2% | 3.1% - 7.3% | 0.0% | 91.8% | 4.0% | 4.3% | 0.0% | 1.1% |
| Endovascular Cardiac Valve Replacement (266,267) | \$264,908,175 | 16.2% | 9.9% - 22.4% | 0.0% | 84.6% | 11.2% | 4.2% | 0.0% | 0.8% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | \$147,126,944 | 1.9% | (0.0%) - 3.8% | 24.2% | 0.0% | 11.2% | 64.6% | 0.0% | 0.5% |
| Degenerative Nervous System Disorders (056, 057) | \$142,872,343 | 16.4% | 11.4% - 21.3% | 0.0% | 48.0% | 47.4% | 4.7% | 0.0% | 0.4% |
| Renal Failure (682, 683, 684) | \$105,377,332 | 4.9% | 2.6% - 7.1% | 0.0% | 0.0% | 80.1% | 19.9% | 0.0% | 0.3% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | \$104,208,684 | 5.4% | 0.1% - 10.8% | 0.0% | 0.0% | 64.6% | 35.4% | 0.0% | 0.3% |
| Spinal Fusion Except Cervical (459, 460) | \$91,167,248 | 4.5% | 2.3% - 6.6% | 0.0% | 27.8% | 61.0% | 5.7% | 5.5% | 0.3% |
| Other Musculoskeletal Sys & Conn Tiss O.R. Proc (515, 516, 517) | \$89,315,292 | 22.4% | 10.1% - 34.7% | 0.0% | 0.0% | 98.9% | 1.1% | 0.0% | 0.3% |
| Organic Disturbances & Mental Retardation (884) | \$85,827,492 | 16.9% | 9.9% - 23.9% | 0.0% | 45.8% | 51.1% | 0.6% | 2.4% | 0.3% |
| Signs & Symptoms (947, 948) | \$84,887,297 | 32.0% | 20.3% - 43.8% | 0.0% | 0.0% | 92.5% | 7.5% | 0.0% | 0.3% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | \$84,856,223 | 7.0% | 3.7% - 10.3% | 0.0% | 0.0% | 77.9% | 22.1% | 0.0% | 0.3% |
| Respiratory Infections & Inflammations (177, 178, 179) | \$80,132,038 | 6.9% | 0.7% - 13.1% | 0.0% | 0.0% | 72.1% | 27.9% | 0.0% | 0.2% |
| Extensive O.R. Procedure Unrelated To Principal Diagnosis (981, 982, 983) | \$80,062,488 | 7.8% | 1.6% - 14.0% | 0.0% | 3.2% | 61.2% | 35.6% | 0.0% | 0.2% |
| Misc Disorders Of Nutrition,metabolism fluids/Electrolytes (640, 641) | \$79,535,230 | 6.8% | 2.4% - 11.2% | 14.4% | 4.0% | 70.8% | 10.7% | 0.0% | 0.2% |
| Syncope & Collapse (312) | \$74,952,089 | 17.8% | 12.1% - 23.5% | 0.0% | 2.9% | 96.9% | 0.2% | 0.0% | 0.2% |
| Chest Pain (313) | \$72,065,446 | 28.3% | 19.5% - 37.1% | 0.0% | 0.0% | 98.8% | 1.2% | 0.0% | 0.2% |
| Other Vascular Procedures (252, 253, 254) | \$71,206,333 | 4.2% | 1.0% - 7.4% | 20.2% | 9.4% | 67.6% | 2.7% | 0.0% | 0.2% |
| Diabetes (637, 638, 639) | \$68,564,186 | 10.6% | 3.8% - 17.4% | 0.0% | 0.0% | 79.8% | 20.2% | 0.0% | 0.2% |

| Part A Hospital IPPS Services (MS-DRGs) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------------------|-----------------------------|-------------------------------|--|---------------------|----------------------|---------------------|-------------|---|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Seizures (100, 101) | \$66,414,503 | 12.9% | 5.9% - 20.0% | 0.0% | 0.0% | 90.5% | 9.5% | 0.0% | 0.2% |
| All Type of Services (Incl. Codes Not Listed) | \$5,548,362,053 | 4.8% | 4.4% - 5.2% | 1.6% | 22.4% | 57.9% | 15.9% | 2.2% | 17.2% |

Appendix E: Improper Payment Rates and Type of Error by Type of Service for Each Claim Type

Appendix E tables are sorted in descending order by improper payment rate. For a full listing of all services with 30 or more claims, see Appendix G.

Table E1: Top 20 Service Type Improper Payment Rates: Part B

| Part B Services (BETOS Codes) | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Consultations | 84.2% | 78.3% - 90.1% | 3.4% | 48.8% | 0.0% | 0.9% | 47.0% | 0.0% |
| Home visit | 41.6% | 22.7% - 60.6% | 1.5% | 92.7% | 0.0% | 5.8% | 0.0% | 0.3% |
| Chiropractic | 41.0% | 34.5% - 47.5% | 0.0% | 88.3% | 7.7% | 4.0% | 0.0% | 0.8% |
| Other - non-Medicare fee schedule | 30.5% | 11.6% - 49.3% | 10.4% | 88.1% | 0.0% | 0.0% | 1.5% | 0.1% |
| Lab tests - other (non-Medicare fee schedule) | 29.8% | 25.7% - 33.9% | 0.6% | 93.7% | 4.7% | 0.0% | 1.0% | 3.0% |
| Minor procedures - musculoskeletal | 29.1% | 15.9% - 42.3% | 0.0% | 86.7% | 13.3% | 0.0% | 0.0% | 1.2% |
| Specialist - other | 27.2% | 17.8% - 36.6% | 3.5% | 94.1% | 0.4% | 2.0% | 0.0% | 0.9% |
| Specialist - psychiatry | 26.3% | 18.3% - 34.3% | 2.5% | 90.3% | 0.0% | 0.8% | 6.3% | 0.9% |
| Hospital visit - initial | 24.6% | 22.6% - 26.7% | 3.3% | 30.3% | 0.0% | 66.4% | 0.0% | 2.1% |
| Lab tests - bacterial cultures | 23.3% | 11.2% - 35.3% | 0.0% | 96.0% | 0.0% | 0.0% | 4.0% | 0.1% |
| Hospital visit - critical care | 19.7% | 15.0% - 24.3% | 5.4% | 39.8% | 0.0% | 54.6% | 0.2% | 0.6% |
| Nursing home visit | 18.2% | 14.5% - 21.8% | 11.5% | 32.1% | 0.0% | 47.5% | 8.9% | 1.1% |
| Ambulatory procedures - other | 17.9% | 9.2% - 26.6% | 1.1% | 98.8% | 0.0% | 0.0% | 0.1% | 0.4% |
| Other - Medicare fee schedule | 16.6% | 5.8% - 27.4% | 0.0% | 87.1% | 0.0% | 7.4% | 5.4% | 0.2% |
| Echography/ultrasonography - carotid arteries | 16.4% | 4.5% - 28.3% | 2.2% | 97.8% | 0.0% | 0.0% | 0.0% | 0.1% |
| Lab tests - routine venipuncture (non Medicare fee schedule) | 16.3% | 12.9% - 19.6% | 0.0% | 1.1% | 98.9% | 0.0% | 0.0% | 0.1% |
| Other tests - electrocardiograms | 15.7% | 10.7% - 20.7% | 4.4% | 94.2% | 0.0% | 0.0% | 1.4% | 0.1% |
| Echography/ultrasonography - abdomen/pelvis | 15.2% | 2.7% - 27.7% | 0.0% | 98.4% | 0.0% | 1.6% | 0.0% | 0.1% |
| Minor procedures - other (Medicare fee schedule) | 15.0% | 11.9% - 18.1% | 1.9% | 91.6% | 2.4% | 3.7% | 0.4% | 1.8% |
| Lab tests - glucose | 14.7% | (6.9%) - 36.3% | 0.0% | 89.6% | 0.0% | 7.4% | 3.0% | 0.0% |
| Overall (Incl. Service Types Not Listed) | 10.7% | 9.3% - 12.0% | 3.4% | 65.2% | 3.1% | 23.6% | 4.7% | 32.5% |

Table E2: Top 20 Service Type Improper Payment Rates: DMEPOS

| DMEPOS (HCPCS) | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|---|-----------------------|-------------------------|---|------------------|-------------------|------------------|--------------|--------------------------------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Orthopedic Footwear | 100.0% | 100.0% - 100.0% | 6.3% | 54.6% | 13.7% | 0.0% | 25.4% | 0.0% |
| TENS | 93.0% | 86.6% - 99.4% | 1.6% | 95.9% | 0.1% | 0.0% | 2.5% | 0.0% |
| Lenses | 85.2% | 76.2% - 94.2% | 1.1% | 77.4% | 2.1% | 0.0% | 19.4% | 0.1% |
| Commodes/Bed Pans/Urinals | 75.4% | 62.3% - 88.6% | 1.8% | 86.7% | 0.0% | 0.0% | 11.6% | 0.0% |
| Support Surfaces | 75.2% | 55.7% - 94.6% | 1.0% | 81.4% | 0.0% | 0.0% | 17.6% | 0.1% |
| Diabetic Shoes | 73.2% | 64.3% - 82.0% | 3.9% | 82.3% | 0.0% | 0.0% | 13.8% | 0.3% |
| Surgical Dressings | 69.2% | 59.3% - 79.1% | 1.0% | 85.0% | 0.2% | 0.0% | 13.7% | 0.5% |
| Intravenous Immune Globulin | 67.1% | 10.6% - 123.5% | 0.0% | 1.0% | 0.0% | 0.0% | 99.0% | 0.0% |
| Tracheostomy Supplies | 61.5% | 42.9% - 80.0% | 0.0% | 51.6% | 0.0% | 0.0% | 48.4% | 0.1% |
| Lower Limb Orthoses | 60.3% | 50.2% - 70.3% | 0.4% | 84.7% | 5.8% | 0.0% | 9.0% | 0.7% |
| Wheelchairs Manual | 58.1% | 41.4% - 74.7% | 4.4% | 85.9% | 2.5% | 0.0% | 7.2% | 0.1% |
| Hospital Beds/Accessories | 57.4% | 49.2% - 65.6% | 2.8% | 86.2% | 0.0% | 0.0% | 11.0% | 0.1% |
| Canes/Crutches | 56.3% | 35.7% - 76.9% | 1.1% | 77.9% | 0.0% | 0.0% | 20.9% | 0.0% |
| All Policy Groups with Less than 30 Claims | 53.8% | 39.2% - 68.5% | 1.8% | 79.1% | 10.3% | 0.0% | 8.8% | 0.2% |
| Breast Prostheses | 52.9% | 41.4% - 64.4% | 1.8% | 96.2% | 0.0% | 0.0% | 1.9% | 0.1% |
| Patient Lift | 52.4% | 26.0% - 78.8% | 2.0% | 98.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Upper Limb Orthoses | 50.8% | 40.4% - 61.2% | 3.0% | 77.1% | 6.9% | 0.0% | 12.9% | 0.3% |
| Walkers | 48.9% | 31.8% - 66.1% | 0.0% | 92.8% | 0.0% | 0.0% | 7.2% | 0.0% |
| Respiratory Assist Device | 48.4% | 40.0% - 56.9% | 1.0% | 91.0% | 0.0% | 0.0% | 8.0% | 0.1% |
| LSO | 46.1% | 38.5% - 53.7% | 8.1% | 63.3% | 6.3% | 0.0% | 22.3% | 0.4% |
| Overall (Incl. Service Types Not Listed) | 35.5% | 33.7% - 37.3% | 3.5% | 78.1% | 2.5% | 0.4% | 15.5% | 8.0% |

Table E3: Top Service Type Improper Payment Rates: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|---|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| All Codes With Less Than 30 Claims | 89.2% | 67.9% -110.4% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.2% |
| Hospital Inpatient (Part A) | 27.5% | 23.4% - 31.5% | 0.1% | 17.0% | 82.9% | 0.0% | 0.0% | 9.4% |
| Clinic CORF | 25.5% | 9.5% - 41.4% | 0.0% | 91.1% | 0.0% | 0.9% | 8.0% | 0.0% |
| Hospital based hospice | 19.3% | 12.6% - 25.9% | 1.1% | 83.4% | 1.4% | 14.1% | 0.1% | 0.9% |
| Home Health | 17.6% | 15.3% - 20.0% | 2.0% | 61.9% | 19.3% | 0.5% | 16.2% | 9.8% |
| Hospital Other Part B | 16.2% | 6.2% - 26.2% | 1.0% | 77.7% | 0.0% | 0.2% | 21.0% | 0.4% |
| Nonhospital based hospice | 11.0% | 8.6% - 13.3% | 5.2% | 56.6% | 28.3% | 9.8% | 0.2% | 5.5% |
| Clinic OPT | 8.6% | (0.2%) - 17.3% | 0.0% | 63.3% | 0.0% | 0.7% | 36.0% | 0.2% |
| SNF Inpatient | 7.0% | 5.4% - 8.6% | 2.4% | 81.3% | 1.7% | 4.1% | 10.5% | 6.7% |
| Critical Access Hospital | 6.1% | 2.8% - 9.5% | 0.0% | 88.4% | 8.4% | 2.3% | 0.9% | 1.2% |
| Clinic ESRD | 3.5% | 2.1% - 5.0% | 0.0% | 99.6% | 0.0% | 0.0% | 0.4% | 1.2% |
| Hospital Outpatient | 3.1% | 2.3% - 4.0% | 2.1% | 85.5% | 1.4% | 3.1% | 7.8% | 6.4% |
| RHC | 3.0% | 0.7% - 5.3% | 17.4% | 70.6% | 0.0% | 0.0% | 12.0% | 0.1% |
| SNF Inpatient Part B | 2.3% | 0.5% - 4.1% | 0.0% | 69.6% | 9.2% | 18.1% | 3.1% | 0.2% |
| FQHC | 1.6% | (1.5%) - 4.7% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.1% |
| SNF Outpatient | 1.4% | (0.6%) - 3.4% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Hospital Inpatient Part B | 0.4% | 0.0% - 0.8% | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Overall (Incl. Service Types Not Listed) | 8.1% | 7.3% - 8.8% | 1.9% | 60.6% | 27.4% | 3.0% | 7.1% | 42.2% |

Table E4: Top 20 Service Type Improper Payment Rates: Part A Hospital IPPS

| Part A Hospital IPPS Services (MS-DRGs) | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Type Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|--|-----------------------|-------------------------|---|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Thyroid, Parathyroid & Thyroglossal Procedures (625, 626, 627) | 49.1% | (4.8%) -102.9% | 0.0% | 0.0% | 98.4% | 1.6% | 0.0% | 0.1% |
| Dysequilibrium (149) | 44.6% | 27.5% - 61.6% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.1% |
| Signs & Symptoms Of Musculoskeletal System & Conn Tissue (555, 556) | 39.1% | 20.1% - 58.1% | 0.0% | 7.1% | 92.5% | 0.4% | 0.0% | 0.1% |
| Signs & Symptoms (947, 948) | 32.0% | 20.3% - 43.8% | 0.0% | 0.0% | 92.5% | 7.5% | 0.0% | 0.3% |
| Chest Pain (313) | 28.3% | 19.5% - 37.1% | 0.0% | 0.0% | 98.8% | 1.2% | 0.0% | 0.2% |
| Atherosclerosis (302, 303) | 24.1% | 8.4% - 39.8% | 0.0% | 0.0% | 79.1% | 20.9% | 0.0% | 0.1% |
| Neuroses Except Depressive (882) | 24.1% | 9.2% - 39.0% | 0.0% | 27.8% | 72.0% | 0.2% | 0.0% | 0.0% |
| Shoulder,elbow Or Forearm Proc,exc Major Joint Proc (510, 511, 512) | 23.9% | 1.3% - 46.6% | 0.0% | 1.2% | 94.8% | 4.0% | 0.0% | 0.1% |
| Other Musculoskelet Sys & Conn Tiss O.R. Proc (515, 516, 517) | 22.4% | 10.1% - 34.7% | 0.0% | 0.0% | 98.9% | 1.1% | 0.0% | 0.3% |
| Back & Neck Proc Exc Spinal Fusion (518, 519, 520) | 22.2% | 12.5% - 32.0% | 0.0% | 10.9% | 86.4% | 2.7% | 0.0% | 0.2% |
| Other Disorders Of Nervous System (091, 092, 093) | 19.8% | 7.6% - 32.1% | 5.9% | 0.0% | 89.6% | 4.5% | 0.0% | 0.2% |
| Syncope & Collapse (312) | 17.8% | 12.1% - 23.5% | 0.0% | 2.9% | 96.9% | 0.2% | 0.0% | 0.2% |
| Bone Diseases & Arthropathies (553, 554) | 17.8% | 7.6% - 28.1% | 6.2% | 6.1% | 87.7% | 0.0% | 0.0% | 0.1% |
| Organic Disturbances & Mental Retardation (884) | 16.9% | 9.9% - 23.9% | 0.0% | 45.8% | 51.1% | 0.6% | 2.4% | 0.3% |
| Degenerative Nervous System Disorders (056, 057) | 16.4% | 11.4% - 21.3% | 0.0% | 48.0% | 47.4% | 4.7% | 0.0% | 0.4% |
| Endovascular Cardiac Valve Replacement (266, 267) | 16.2% | 9.9% - 22.4% | 0.0% | 84.6% | 11.2% | 4.2% | 0.0% | 0.8% |
| Transient Ischemia (069) | 13.9% | 1.5% - 26.3% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% | 0.1% |
| Psychoses (885) | 13.2% | 9.9% - 16.5% | 0.0% | 60.0% | 30.9% | 0.2% | 8.9% | 1.4% |
| Pathological Fractures & Musculoskelet & Conn Tiss Malig (542, 543, 544) | 13.1% | 2.0% - 24.3% | 0.0% | 0.0% | 98.2% | 1.8% | 0.0% | 0.1% |
| Seizures (100, 101) | 12.9% | 5.9% - 20.0% | 0.0% | 0.0% | 90.5% | 9.5% | 0.0% | 0.2% |
| Overall (Incl. Service Types Not Listed) | 4.8% | 4.4% - 5.2% | 1.6% | 22.4% | 57.9% | 15.9% | 2.2% | 17.2% |

Appendix F: Projected Improper Payments by Type of Service for Each Type of Error

Appendix F tables are sorted in descending order by projected improper payments.

Table F1: Top 20 Types of Services with No Documentation Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Nonhospital based hospice | \$92,352,308 | 0.6% | 0.0% - 1.1% | 0.3% |
| Hospital visit - subsequent | \$79,444,399 | 1.5% | 0.6% - 2.4% | 0.2% |
| Home Health | \$62,754,416 | 0.3% | 0.0% - 0.7% | 0.2% |
| Office visits - established | \$59,365,702 | 0.4% | (0.0%) - 0.8% | 0.2% |
| SNF Inpatient | \$51,578,264 | 0.2% | (0.0%) - 0.4% | 0.2% |
| Hospital Outpatient | \$44,072,372 | 0.1% | (0.0%) - 0.2% | 0.1% |
| Nursing home visit | \$40,824,072 | 2.1% | 0.4% - 3.8% | 0.1% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | \$35,595,553 | 0.5% | (0.4%) - 1.4% | 0.1% |
| Hospital visit - initial | \$22,953,047 | 0.8% | 0.3% - 1.4% | 0.1% |
| Oxygen Supplies/Equipment | \$16,994,298 | 2.5% | 1.3% - 3.6% | 0.1% |
| Other tests - other | \$14,636,481 | 0.8% | (0.3%) - 1.9% | 0.0% |
| Other Vascular Procedures (252, 253, 254) | \$14,407,789 | 0.9% | (0.8%) - 2.5% | 0.0% |
| Misc Disorders Of Nutrition,metabolism,fluids/Electrolytes (640, 641) | \$11,486,190 | 1.0% | (0.9%) - 2.9% | 0.0% |
| Minor procedures - other (Medicare fee schedule) | \$11,387,800 | 0.3% | (0.0%) - 0.6% | 0.0% |
| Hospital visit - critical care | \$10,708,987 | 1.1% | (0.1%) - 2.3% | 0.0% |
| LSO | \$10,701,581 | 3.7% | 0.9% - 6.5% | 0.0% |
| Specialist - other | \$10,266,058 | 0.9% | (0.5%) - 2.4% | 0.0% |
| Echography/ultrasonography - heart | \$10,091,750 | 1.5% | (0.2%) - 3.2% | 0.0% |
| Specialist - psychiatry | \$7,437,759 | 0.7% | (0.6%) - 2.0% | 0.0% |
| Immunosuppressive Drugs | \$7,153,709 | 2.4% | 0.5% - 4.4% | 0.0% |
| Overall (Incl. Codes Not Listed) | \$806,993,579 | 0.2% | 0.1% - 0.3% | 2.5% |

Table F2: Top 20 Types of Services with Insufficient Documentation Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Home Health | \$1,957,104,493 | 10.9% | 9.0% - 12.9% | 6.1% |
| Hospital Outpatient | \$1,757,570,633 | 2.7% | 2.0% - 3.4% | 5.5% |
| SNF Inpatient | \$1,745,413,508 | 5.7% | 4.2% - 7.2% | 5.4% |
| Nonhospital based hospice | \$1,006,679,321 | 6.2% | 4.4% - 8.0% | 3.1% |
| Lab tests - other (non-Medicare fee schedule) | \$919,909,257 | 27.9% | 24.2% - 31.7% | 2.9% |
| Other drugs | \$718,512,382 | 6.0% | (0.2%) - 12.2% | 2.2% |
| Minor procedures - other (Medicare fee schedule) | \$537,910,457 | 13.8% | 10.8% - 16.7% | 1.7% |
| Hospital Inpatient (Part A) | \$514,604,742 | 4.7% | 3.0% - 6.4% | 1.6% |
| Ambulance | \$413,299,827 | 9.3% | 6.4% - 12.1% | 1.3% |
| Clinic ESRD | \$393,256,042 | 3.5% | 2.1% - 5.0% | 1.2% |
| Critical Access Hospital | \$341,650,922 | 5.4% | 2.2% - 8.6% | 1.1% |
| Minor procedures - musculoskeletal | \$340,626,908 | 25.2% | 12.7% - 37.7% | 1.1% |
| Major Joint Replacement Or Reattachment Of Lower Extremity (469, 470) | \$319,605,269 | 4.8% | 2.8% - 6.8% | 1.0% |
| Hospital visit - subsequent | \$316,703,775 | 5.9% | 4.4% - 7.3% | 1.0% |
| Specialist - other | \$277,421,303 | 25.6% | 16.2% - 35.1% | 0.9% |
| Psychoses (885) | \$277,199,092 | 7.9% | 5.5% - 10.3% | 0.9% |
| Specialist - psychiatry | \$265,126,930 | 23.7% | 16.0% - 31.5% | 0.8% |
| Office visits - established | \$256,969,225 | 1.7% | 1.0% - 2.4% | 0.8% |
| Oxygen Supplies/Equipment | \$239,051,125 | 34.9% | 31.5% - 38.3% | 0.7% |
| Chiropractic | \$230,337,298 | 36.2% | 29.7% - 42.7% | 0.7% |
| Overall (Incl. Codes Not Listed) | \$18,328,661,677 | 4.7% | 4.4% - 5.0% | 56.9% |

Table F3: Top 20 Types of Services with Medical Necessity Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Hospital Inpatient (Part A) | \$2,509,814,129 | 22.8% | 19.1% - 26.5% | 7.8% |
| Home Health | \$610,789,809 | 3.4% | 2.5% - 4.3% | 1.9% |
| Nonhospital based hospice | \$503,075,086 | 3.1% | 1.7% - 4.5% | 1.6% |
| Ambulance | \$142,746,534 | 3.2% | 1.6% - 4.8% | 0.4% |
| Psychoses (885) | \$142,576,743 | 4.1% | 2.0% - 6.1% | 0.4% |
| Other Musculoskelet Sys & Conn Tiss O.R. Proc (515, 516, 517) | \$88,343,096 | 22.2% | 9.9% - 34.5% | 0.3% |
| Renal Failure (682, 683, 684) | \$84,359,028 | 3.9% | 1.7% - 6.1% | 0.3% |
| Signs & Symptoms (947, 948) | \$78,552,769 | 29.6% | 17.8% - 41.5% | 0.2% |
| Syncope & Collapse (312) | \$72,595,393 | 17.3% | 11.6% - 22.9% | 0.2% |
| Chest Pain (313) | \$71,217,584 | 28.0% | 19.2% - 36.8% | 0.2% |
| Degenerative Nervous System Disorders (056, 057) | \$67,654,977 | 7.8% | 4.7% - 10.8% | 0.2% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | \$67,279,838 | 3.5% | (1.8%) - 8.8% | 0.2% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | \$66,090,499 | 5.5% | 2.3% - 8.6% | 0.2% |
| Seizures (100, 101) | \$60,086,005 | 11.7% | 4.6% - 18.7% | 0.2% |
| Respiratory Infections & Inflammations (177, 178, 179) | \$57,762,848 | 5.0% | (1.1%) - 11.0% | 0.2% |
| Misc Disorders Of Nutrition,metabolism,fluids/Electrolytes (640, 641) | \$56,334,349 | 4.8% | 0.9% - 8.7% | 0.2% |
| Spinal Fusion Except Cervical (459, 460) | \$55,597,213 | 2.7% | 1.1% - 4.4% | 0.2% |
| Diabetes (637, 638, 639) | \$54,707,637 | 8.4% | 1.9% - 15.0% | 0.2% |
| G.I. Hemorrhage (377, 378, 379) | \$54,573,833 | 3.7% | 0.1% - 7.3% | 0.2% |
| Minor procedures - musculoskeletal | \$52,047,225 | 3.9% | (3.5%) - 11.2% | 0.2% |
| Overall (Incl. Codes Not Listed) | \$7,333,744,949 | 1.9% | 1.7% - 2.1% | 22.8% |

Table F4: Top 20 Types of Services with Incorrect Coding Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Office visits - established | \$697,263,185 | 4.7% | 4.0% - 5.4% | 2.2% |
| Hospital visit - initial | \$456,916,649 | 16.3% | 14.9% - 17.8% | 1.4% |
| Hospital visit - subsequent | \$370,880,343 | 6.9% | 5.9% - 7.8% | 1.2% |
| Office visits - new | \$296,175,113 | 10.9% | 9.2% - 12.7% | 0.9% |
| Emergency room visit | \$224,685,503 | 10.7% | 8.9% - 12.5% | 0.7% |
| Nonhospital based hospice | \$174,511,113 | 1.1% | 0.4% - 1.7% | 0.5% |
| Nursing home visit | \$168,814,635 | 8.6% | 6.7% - 10.6% | 0.5% |
| Hospital visit - critical care | \$108,080,116 | 10.7% | 7.7% - 13.8% | 0.3% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | \$95,095,846 | 1.2% | (0.4%) - 2.9% | 0.3% |
| SNF Inpatient | \$87,729,212 | 0.3% | 0.1% - 0.4% | 0.3% |
| Hospital Outpatient | \$64,612,627 | 0.1% | 0.0% - 0.2% | 0.2% |
| Infectious & Parasitic Diseases W O.R. Procedure (853, 854, 855) | \$52,281,089 | 1.5% | (0.6%) - 3.6% | 0.2% |
| Hospital based hospice | \$38,827,584 | 2.7% | 0.4% - 5.0% | 0.1% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | \$36,928,846 | 1.9% | 0.8% - 3.1% | 0.1% |
| Ambulance | \$32,132,914 | 0.7% | 0.3% - 1.1% | 0.1% |
| Extensive O.R. Procedure Unrelated To Principal Diagnosis (981, 982, 983) | \$28,501,091 | 2.8% | (0.5%) - 6.1% | 0.1% |
| Major Small & Large Bowel Procedures (329, 330, 331) | \$25,258,888 | 1.1% | 0.3% - 1.9% | 0.1% |
| Respiratory Infections & Inflammations (177, 178, 179) | \$22,369,190 | 1.9% | 0.4% - 3.4% | 0.1% |
| Minor procedures - other (Medicare fee schedule) | \$21,484,968 | 0.5% | 0.0% - 1.1% | 0.1% |
| Renal Failure (682, 683, 684) | \$21,018,304 | 1.0% | 0.4% - 1.6% | 0.1% |
| Overall (Incl. Codes Not Listed) | \$3,764,212,184 | 1.0% | 0.9% - 1.0% | 11.7% |

Table F5: Top 20 Types of Services with Downcoding²³ Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Office visits - established | \$325,258,777 | 2.2% | 1.7% - 2.7% | 1.0% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | \$76,499,768 | 1.0% | (0.6%) - 2.6% | 0.2% |
| Hospital visit - subsequent | \$50,457,784 | 0.9% | 0.6% - 1.3% | 0.2% |
| Hospital Outpatient ²⁴ | \$28,597,713 | 0.0% | (0.0%) - 0.1% | 0.1% |
| Nursing home visit | \$25,059,197 | 1.3% | 0.4% - 2.1% | 0.1% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | \$23,287,427 | 1.2% | 0.3% - 2.2% | 0.1% |
| Heart Failure & Shock (291, 292, 293) | \$19,459,853 | 0.5% | 0.1% - 0.9% | 0.1% |
| Other Circulatory System Diagnoses (314, 315, 316) | \$18,560,320 | 2.2% | (0.9%) - 5.3% | 0.1% |
| Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463, 464, 465) | \$16,686,325 | 2.6% | (1.0%) - 6.1% | 0.1% |
| Minor procedures - other (Medicare fee schedule) | \$15,252,155 | 0.4% | (0.1%) - 0.9% | 0.0% |
| Major Joint Replacement Or Reattachment Of Lower Extremity (469, 470) | \$14,892,702 | 0.2% | (0.1%) - 0.6% | 0.0% |
| Kidney & Urinary Tract Infections (689, 690) | \$14,431,164 | 1.1% | 0.1% - 2.1% | 0.0% |
| Respiratory Infections & Inflammations (177, 178, 179) | \$13,690,466 | 1.2% | 0.1% - 2.3% | 0.0% |
| Major Small & Large Bowel Procedures (329, 330, 331) | \$13,541,097 | 0.6% | 0.1% - 1.1% | 0.0% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | \$12,914,804 | 1.1% | (0.0%) - 2.1% | 0.0% |
| Hospital visit - initial | \$12,852,675 | 0.5% | 0.1% - 0.8% | 0.0% |
| Other Digestive System O.R. Procedures (356, 357, 358) | \$11,372,559 | 2.4% | (0.5%) - 5.3% | 0.0% |
| Emergency room visit | \$10,284,864 | 0.5% | (0.1%) - 1.1% | 0.0% |
| Skin Debridement (570, 571, 572) | \$9,462,814 | 5.1% | (0.3%) - 10.6% | 0.0% |
| Endovascular Cardiac Valve Replacement (266, 267) | \$9,190,322 | 0.6% | (0.1%) - 1.2% | 0.0% |
| Overall (Incl. Codes Not Listed) | \$1,006,552,848 | 0.3% | 0.2% - 0.3% | 3.1% |

²³ Downcoding refers to billing a lower level service or a service with a lower payment than is supported by the medical record documentation.

²⁴ Downcoding errors represent less than one one-tenth of a percent of Hospital Outpatient expenditures.

Table F6: Top 20 Types of Services with Other Errors

| Medicare FFS Services | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Home Health | \$512,343,297 | 2.9% | 1.7% - 4.0% | 1.6% |
| Other drugs | \$362,178,523 | 3.0% | (3.3%) - 9.4% | 1.1% |
| SNF Inpatient | \$226,242,195 | 0.7% | 0.2% - 1.3% | 0.7% |
| Hospital Outpatient | \$160,701,272 | 0.2% | (0.2%) - 0.7% | 0.5% |
| Psychoses (885) | \$40,865,580 | 1.2% | (0.1%) - 2.4% | 0.1% |
| Cardiac Valve & Oth Maj Cardiothoracic Proc WO Card Cath (219, 220, 221) | \$39,713,007 | 2.6% | (2.4%) - 7.5% | 0.1% |
| Oxygen Supplies/Equipment | \$33,626,932 | 4.9% | 3.2% - 6.6% | 0.1% |
| Infusion Pumps & Related Drugs | \$32,284,330 | 5.1% | 1.2% - 9.1% | 0.1% |
| Nursing home visit | \$31,601,234 | 1.6% | (0.5%) - 3.8% | 0.1% |
| LSO | \$29,449,133 | 10.3% | 5.3% - 15.3% | 0.1% |
| Hospital Other Part B | \$28,033,298 | 3.4% | (3.1%) - 9.9% | 0.1% |
| CPAP | \$25,243,430 | 4.1% | 2.5% - 5.7% | 0.1% |
| Urological Supplies | \$23,327,888 | 8.4% | 3.3% - 13.6% | 0.1% |
| Surgical Dressings | \$21,572,670 | 9.5% | 4.1% - 14.9% | 0.1% |
| Lower Limb Orthoses | \$21,195,784 | 5.4% | 2.8% - 8.1% | 0.1% |
| Enteral Nutrition | \$20,348,478 | 12.0% | 7.2% - 16.9% | 0.1% |
| Immunosuppressive Drugs | \$20,077,452 | 6.8% | 3.8% - 9.8% | 0.1% |
| Ventilators | \$20,007,205 | 6.5% | 3.7% - 9.2% | 0.1% |
| Specialist - psychiatry | \$18,518,512 | 1.7% | (0.9%) - 4.2% | 0.1% |
| Clinic OPT | \$18,273,216 | 3.1% | (2.9%) - 9.1% | 0.1% |
| Overall (Incl. Codes Not Listed) | \$1,977,635,902 | 0.5% | 0.3% - 0.7% | 6.1% |

Appendix G: Projected Improper Payments by Type of Service for Each Claim Type

This series of tables is sorted in descending order by projected improper payments. All estimates in these tables are based on a minimum of 30 lines in the sample.

Table G1: Improper Payment Rates by Service Type: Part B

| Part B Services (BETOS Codes) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Other drugs | 790 | \$1,092,458,318 | 9.1% | (0.1%) - 18.4% | 3.4% |
| Office visits - established | 1,461 | \$1,050,386,680 | 7.1% | 6.0% - 8.2% | 3.3% |
| Lab tests - other (non-Medicare fee schedule) | 4,287 | \$981,823,792 | 29.8% | 25.7% - 33.9% | 3.0% |
| Hospital visit - subsequent | 1,567 | \$767,051,514 | 14.2% | 12.4% - 16.0% | 2.4% |
| Hospital visit - initial | 1,042 | \$688,320,885 | 24.6% | 22.6% - 26.7% | 2.1% |
| Ambulance | 646 | \$599,536,134 | 13.4% | 10.2% - 16.6% | 1.9% |
| Minor procedures - other (Medicare fee schedule) | 1,308 | \$587,274,834 | 15.0% | 11.9% - 18.1% | 1.8% |
| Minor procedures - musculoskeletal | 168 | \$392,674,133 | 29.1% | 15.9% - 42.3% | 1.2% |
| Nursing home visit | 480 | \$355,453,205 | 18.2% | 14.5% - 21.8% | 1.1% |
| Office visits - new | 519 | \$344,549,782 | 12.7% | 10.5% - 14.9% | 1.1% |
| Specialist - other | 748 | \$294,693,195 | 27.2% | 17.8% - 36.6% | 0.9% |
| Specialist - psychiatry | 788 | \$293,503,840 | 26.3% | 18.3% - 34.3% | 0.9% |
| Chiropractic | 383 | \$260,878,720 | 41.0% | 34.5% - 47.5% | 0.8% |
| Other tests - other | 1,037 | \$246,371,070 | 13.4% | 7.5% - 19.3% | 0.8% |
| Emergency room visit | 384 | \$238,537,192 | 11.3% | 9.4% - 13.3% | 0.7% |
| Hospital visit - critical care | 322 | \$197,877,373 | 19.7% | 15.0% - 24.3% | 0.6% |
| All Codes With Less Than 30 Claims | 206 | \$144,058,136 | 2.4% | (0.1%) - 4.9% | 0.4% |
| Ambulatory procedures - other | 508 | \$142,495,895 | 17.9% | 9.2% - 26.6% | 0.4% |
| Advanced imaging - CAT/CT/CTA: other | 133 | \$133,362,254 | 12.9% | 5.3% - 20.5% | 0.4% |
| Oncology - radiation therapy | 33 | \$112,699,466 | 10.3% | (2.2%) - 22.7% | 0.3% |
| Eye procedure - cataract removal/lens insertion | 189 | \$111,630,382 | 6.6% | 1.0% - 12.2% | 0.3% |
| Ambulatory procedures - skin | 243 | \$104,738,131 | 5.5% | 1.8% - 9.2% | 0.3% |
| Minor procedures - skin | 239 | \$95,958,664 | 7.0% | 2.2% - 11.8% | 0.3% |
| Home visit | 124 | \$91,838,877 | 41.6% | 22.7% - 60.6% | 0.3% |
| Lab tests - other (Medicare fee schedule) | 231 | \$86,909,792 | 6.8% | 1.6% - 12.0% | 0.3% |
| Dialysis services (Medicare Fee Schedule) | 135 | \$85,793,916 | 10.3% | 4.3% - 16.3% | 0.3% |
| Standard imaging - nuclear medicine | 199 | \$77,689,260 | 9.4% | 3.3% - 15.6% | 0.2% |

| Part B Services (BETOS Codes) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Echography/ultrasonography - heart | 127 | \$72,707,845 | 10.6% | 4.0% - 17.3% | 0.2% |
| Chemotherapy | 156 | \$64,081,928 | 2.1% | (0.3%) - 4.5% | 0.2% |
| Other - Medicare fee schedule | 102 | \$55,030,629 | 16.6% | 5.8% - 27.4% | 0.2% |
| Standard imaging - musculoskeletal | 227 | \$50,701,151 | 10.7% | 5.3% - 16.1% | 0.2% |
| Advanced imaging - CAT/CT/CTA: brain/head/neck | 73 | \$46,120,620 | 12.8% | 4.2% - 21.5% | 0.1% |
| Lab tests - automated general profiles | 687 | \$44,087,088 | 13.3% | 10.1% - 16.5% | 0.1% |
| Other tests - electrocardiograms | 381 | \$41,582,029 | 15.7% | 10.7% - 20.7% | 0.1% |
| Advanced imaging - MRI/MRA: other | 143 | \$40,396,612 | 4.8% | 0.0% - 9.5% | 0.1% |
| Echography/ultrasonography - abdomen/pelvis | 55 | \$39,601,218 | 15.2% | 2.7% - 27.7% | 0.1% |
| Echography/ultrasonography - other | 104 | \$39,248,667 | 9.9% | 2.6% - 17.2% | 0.1% |
| Specialist - ophthalmology | 341 | \$39,037,748 | 2.0% | 0.7% - 3.2% | 0.1% |
| Echography/ultrasonography - carotid arteries | 105 | \$38,347,883 | 16.4% | 4.5% - 28.3% | 0.1% |
| Standard imaging - chest | 269 | \$38,175,000 | 12.6% | 8.1% - 17.0% | 0.1% |
| Anesthesia | 153 | \$36,427,656 | 2.0% | (0.3%) - 4.4% | 0.1% |
| Imaging/procedure - other | 76 | \$32,588,862 | 5.4% | (2.0%) - 12.8% | 0.1% |
| Lab tests - blood counts | 592 | \$31,881,343 | 11.6% | 8.5% - 14.8% | 0.1% |
| Standard imaging - other | 97 | \$25,360,127 | 11.2% | (1.7%) - 24.1% | 0.1% |
| Lab tests - routine venipuncture (non Medicare fee schedule) | 808 | \$20,164,338 | 16.3% | 12.9% - 19.6% | 0.1% |
| Lab tests - bacterial cultures | 69 | \$18,316,873 | 23.3% | 11.2% - 35.3% | 0.1% |
| Other - non-Medicare fee schedule | 76 | \$17,755,811 | 30.5% | 11.6% - 49.3% | 0.1% |
| Standard imaging - breast | 78 | \$16,215,875 | 3.5% | (1.3%) - 8.4% | 0.1% |
| Major procedure, cardiovascular-Other | 83 | \$15,953,337 | 1.2% | (0.3%) - 2.8% | 0.0% |
| Other tests - EKG monitoring | 36 | \$13,562,237 | 3.4% | (0.6%) - 7.4% | 0.0% |
| Oncology - other | 280 | \$10,490,824 | 4.2% | (1.5%) - 10.0% | 0.0% |
| Immunizations/Vaccinations | 194 | \$8,212,616 | 0.6% | (0.5%) - 1.8% | 0.0% |
| Lab tests - urinalysis | 324 | \$7,915,618 | 13.2% | 8.2% - 18.3% | 0.0% |
| Undefined codes | 652 | \$6,972,867 | 8.4% | 1.4% - 15.5% | 0.0% |
| Other tests - cardiovascular stress tests | 81 | \$6,831,534 | 7.7% | 1.4% - 14.1% | 0.0% |
| Endoscopy - upper gastrointestinal | 35 | \$6,485,888 | 2.0% | (0.9%) - 5.0% | 0.0% |
| Lab tests - glucose | 59 | \$4,267,236 | 14.7% | (6.9%) - 36.3% | 0.0% |
| Eye procedure - other | 239 | \$3,957,822 | 0.7% | 0.1% - 1.2% | 0.0% |
| Consultations | 255 | \$666,888 | 84.2% | 78.3% - 90.1% | 0.0% |
| Major procedure - Other | 79 | \$621,392 | 0.0% | (0.0%) - 0.1% | 0.0% |

| Part B Services (BETOS Codes) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Endoscopy - colonoscopy | 33 | N/A | 0.0% | N/A | N/A |
| All Type of Services (Incl. Codes Not Listed) | 17,037 | \$10,472,333,004 | 10.7% | 9.3% - 12.0% | 32.5% |

Table G2: Improper Payment Rates by Service Type: DMEPOS

| DMEPOS (HCPCS) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Oxygen Supplies/Equipment | 1,157 | \$290,625,427 | 42.4% | 38.8% - 46.0% | 0.9% |
| CPAP | 1,172 | \$253,477,201 | 41.4% | 36.7% - 46.1% | 0.8% |
| Lower Limb Orthoses | 481 | \$235,220,363 | 60.3% | 50.2% - 70.3% | 0.7% |
| Surgical Dressings | 300 | \$157,037,254 | 69.2% | 59.3% - 79.1% | 0.5% |
| Infusion Pumps & Related Drugs | 578 | \$138,108,379 | 21.9% | 15.0% - 28.9% | 0.4% |
| LSO | 275 | \$132,114,273 | 46.1% | 38.5% - 53.7% | 0.4% |
| Nebulizers & Related Drugs | 1,088 | \$107,191,438 | 15.2% | 12.0% - 18.5% | 0.3% |
| Diabetic Shoes | 203 | \$104,817,113 | 73.2% | 64.3% - 82.0% | 0.3% |
| Ostomy Supplies | 370 | \$92,491,689 | 40.3% | 33.3% - 47.3% | 0.3% |
| Ventilators | 490 | \$91,386,597 | 29.6% | 24.9% - 34.2% | 0.3% |
| Immunosuppressive Drugs | 664 | \$91,238,292 | 30.8% | 22.2% - 39.5% | 0.3% |
| Upper Limb Orthoses | 212 | \$80,974,522 | 50.8% | 40.4% - 61.2% | 0.3% |
| Glucose Monitor | 752 | \$78,872,471 | 45.6% | 38.3% - 52.8% | 0.2% |
| All Policy Groups with Less than 30 Claims | 171 | \$75,101,927 | 53.8% | 39.2% - 68.5% | 0.2% |
| Urological Supplies | 446 | \$72,218,279 | 26.1% | 19.0% - 33.1% | 0.2% |
| Enteral Nutrition | 348 | \$68,113,376 | 40.2% | 32.7% - 47.7% | 0.2% |
| Lower Limb Prostheses | 172 | \$46,603,468 | 11.1% | 4.7% - 17.5% | 0.1% |
| Wheelchairs Manual | 289 | \$42,782,208 | 58.1% | 41.4% - 74.7% | 0.1% |
| Parenteral Nutrition | 208 | \$41,818,030 | 21.6% | 13.3% - 29.8% | 0.1% |
| Wheelchairs Options/Accessories | 223 | \$37,949,391 | 30.6% | 15.0% - 46.2% | 0.1% |
| Respiratory Assist Device | 164 | \$37,942,794 | 48.4% | 40.0% - 56.9% | 0.1% |
| Oral Anti-Cancer Drugs | 234 | \$37,034,163 | 30.3% | 20.7% - 40.0% | 0.1% |
| Hospital Beds/Accessories | 221 | \$31,643,006 | 57.4% | 49.2% - 65.6% | 0.1% |
| Lenses | 78 | \$31,613,320 | 85.2% | 76.2% - 94.2% | 0.1% |
| Osteogenesis Stimulator | 152 | \$30,918,572 | 21.1% | 12.8% - 29.5% | 0.1% |
| Negative Pressure Wound Therapy | 108 | \$24,405,844 | 32.8% | 22.7% - 42.9% | 0.1% |
| Breast Prostheses | 90 | \$23,562,941 | 52.9% | 41.4% - 64.4% | 0.1% |
| Support Surfaces | 86 | \$18,811,948 | 75.2% | 55.7% - 94.6% | 0.1% |
| Tracheostomy Supplies | 38 | \$16,862,541 | 61.5% | 42.9% - 80.0% | 0.1% |
| Intravenous Immune Globulin | 71 | \$15,167,130 | 67.1% | 10.6% -123.5% | 0.0% |
| Walkers | 73 | \$9,638,478 | 48.9% | 31.8% - 66.1% | 0.0% |
| Automatic External Defibrillator | 147 | \$9,583,638 | 5.4% | 1.7% - 9.1% | 0.0% |
| Patient Lift | 63 | \$9,173,580 | 52.4% | 26.0% - 78.8% | 0.0% |

| DMEPOS (HCPCS) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Wheelchairs Motorized | 71 | \$8,872,128 | 11.2% | 0.9% - 21.5% | 0.0% |
| Orthopedic Footwear | 47 | \$8,354,672 | 100.0% | 100.0% -100.0% | 0.0% |
| Suction Pump | 125 | \$7,927,720 | 44.2% | 28.0% - 60.4% | 0.0% |
| Wheelchairs Seating | 49 | \$7,371,947 | 25.6% | 7.1% - 44.1% | 0.0% |
| HFCWO Device | 51 | \$6,975,369 | 19.6% | 7.5% - 31.7% | 0.0% |
| Commodes/Bed Pans/Urinals | 75 | \$6,712,283 | 75.4% | 62.3% - 88.6% | 0.0% |
| Repairs/DMEPOS | 32 | \$3,148,689 | 41.4% | 16.1% - 66.7% | 0.0% |
| Canes/Crutches | 40 | \$2,251,957 | 56.3% | 35.7% - 76.9% | 0.0% |
| TENS | 104 | \$2,138,318 | 93.0% | 86.6% - 99.4% | 0.0% |
| Misc Drugs | 32 | N/A | N/A | N/A | N/A |
| Routinely Denied Items | 137 | N/A | N/A | N/A | N/A |
| All Type of Services (Incl. Codes Not Listed) | 10,981 | \$2,588,252,739 | 35.5% | 33.7% - 37.3% | 8.0% |

Table G3: Improper Payment Rates by Service Type: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Home Health | 1,175 | \$3,159,762,318 | 17.6% | 15.3% - 20.0% | 9.8% |
| Hospital Inpatient (Part A) | 933 | \$3,028,843,725 | 27.5% | 23.4% - 31.5% | 9.4% |
| SNF Inpatient | 1,611 | \$2,148,184,957 | 7.0% | 5.4% - 8.6% | 6.7% |
| Hospital Outpatient | 2,236 | \$2,054,966,891 | 3.1% | 2.3% - 4.0% | 6.4% |
| Nonhospital based hospice | 766 | \$1,780,099,205 | 11.0% | 8.6% - 13.3% | 5.5% |
| Clinic ESRD | 612 | \$394,644,185 | 3.5% | 2.1% - 5.0% | 1.2% |
| Critical Access Hospital | 275 | \$386,619,186 | 6.1% | 2.8% - 9.5% | 1.2% |
| Hospital based hospice | 154 | \$275,887,344 | 19.3% | 12.6% - 25.9% | 0.9% |
| Hospital Other Part B | 111 | \$133,323,795 | 16.2% | 6.2% - 26.2% | 0.4% |
| SNF Inpatient Part B | 94 | \$69,041,788 | 2.3% | 0.5% - 4.1% | 0.2% |
| All Codes With Less Than 30 Claims | 6 | \$51,021,678 | 89.2% | 67.9% - 110.4% | 0.2% |
| Clinic OPT | 48 | \$50,728,222 | 8.6% | (0.2%) - 17.3% | 0.2% |
| RHC | 211 | \$38,030,705 | 3.0% | 0.7% - 5.3% | 0.1% |
| FQHC | 75 | \$17,783,129 | 1.6% | (1.5%) - 4.7% | 0.1% |
| Clinic CORF | 73 | \$6,229,586 | 25.5% | 9.5% - 41.4% | 0.0% |
| Hospital Inpatient Part B | 48 | \$3,958,361 | 0.4% | 0.0% - 0.8% | 0.0% |
| SNF Outpatient | 52 | \$3,175,420 | 1.4% | (0.6%) - 3.4% | 0.0% |
| All Type of Services (Incl. Codes Not Listed) | 8,480 | \$13,602,300,496 | 8.1% | 7.3% - 8.8% | 42.2% |

Table G4: Improper Payment Rates by Service Type: Part A Hospital IPPS

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| All Codes With Less Than 30 Claims | 1,567 | \$836,326,773 | 4.5% | 3.5% - 5.6% | 2.6% |
| Psychoses (885) | 703 | \$461,746,775 | 13.2% | 9.9% - 16.5% | 1.4% |
| Major Joint Replacement Or Reattachment Of Lower Extremity (469, 470) | 428 | \$348,336,657 | 5.2% | 3.1% - 7.3% | 1.1% |
| Endovascular Cardiac Valve Replacement (266, 267) | 246 | \$264,908,175 | 16.2% | 9.9% - 22.4% | 0.8% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | 188 | \$147,126,944 | 1.9% | (0.0%) - 3.8% | 0.5% |
| Degenerative Nervous System Disorders (056, 057) | 286 | \$142,872,343 | 16.4% | 11.4% - 21.3% | 0.4% |
| Renal Failure (682, 683, 684) | 366 | \$105,377,332 | 4.9% | 2.6% - 7.1% | 0.3% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | 208 | \$104,208,684 | 5.4% | 0.1% - 10.8% | 0.3% |
| Spinal Fusion Except Cervical (459, 460) | 317 | \$91,167,248 | 4.5% | 2.3% - 6.6% | 0.3% |
| Other Musculoskelet Sys & Conn Tiss O.R. Proc (515, 516, 517) | 41 | \$89,315,292 | 22.4% | 10.1% - 34.7% | 0.3% |
| Organic Disturbances & Mental Retardation (884) | 162 | \$85,827,492 | 16.9% | 9.9% - 23.9% | 0.3% |
| Signs & Symptoms (947, 948) | 66 | \$84,887,297 | 32.0% | 20.3% - 43.8% | 0.3% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | 314 | \$84,856,223 | 7.0% | 3.7% - 10.3% | 0.3% |
| Respiratory Infections & Inflammations (177, 178, 179) | 121 | \$80,132,038 | 6.9% | 0.7% - 13.1% | 0.2% |
| Extensive O.R. Procedure Unrelated To Principal Diagnosis (981, 982, 983) | 87 | \$80,062,488 | 7.8% | 1.6% - 14.0% | 0.2% |
| Misc Disorders Of Nutrition,metabolism,fluids/Electrolytes (640, 641) | 155 | \$79,535,230 | 6.8% | 2.4% - 11.2% | 0.2% |
| Syncope & Collapse (312) | 183 | \$74,952,089 | 17.8% | 12.1% - 23.5% | 0.2% |
| Chest Pain (313) | 129 | \$72,065,446 | 28.3% | 19.5% - 37.1% | 0.2% |
| Other Vascular Procedures (252, 253, 254) | 220 | \$71,206,333 | 4.2% | 1.0% - 7.4% | 0.2% |
| Diabetes (637, 638, 639) | 95 | \$68,564,186 | 10.6% | 3.8% - 17.4% | 0.2% |
| Seizures (100, 101) | 95 | \$66,414,503 | 12.9% | 5.9% - 20.0% | 0.2% |
| Other Circulatory System Diagnoses (314, 315, 316) | 77 | \$64,139,955 | 7.7% | 0.7% - 14.7% | 0.2% |
| Cardiac Arrhythmia & Conduction Disorders (308, 309, 310) | 201 | \$61,001,043 | 4.9% | 2.1% - 7.7% | 0.2% |
| Back & Neck Proc Exc Spinal Fusion (518, 519, 520) | 137 | \$58,732,045 | 22.2% | 12.5% - 32.0% | 0.2% |
| Circulatory Disorders Except AMI, W Card Cath (286, 287) | 157 | \$57,641,960 | 5.7% | 2.1% - 9.3% | 0.2% |
| G.I. Hemorrhage (377, 378, 379) | 120 | \$55,642,639 | 3.7% | 0.1% - 7.4% | 0.2% |
| Chronic Obstructive Pulmonary Disease (190, 191, 192) | 144 | \$54,787,826 | 2.6% | 0.3% - 5.0% | 0.2% |
| Cardiac Valve & Oth Maj Cardiothoracic Proc WO Card Cath (219, 220, 221) | 70 | \$54,190,728 | 3.5% | (1.7%) - 8.8% | 0.2% |
| Other Disorders Of Nervous System (091, 092, 093) | 70 | \$53,999,076 | 19.8% | 7.6% - 32.1% | 0.2% |

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Lower Extrem & Humer Proc Except Hip,foot,femur (492, 493, 494) | 79 | \$52,989,659 | 8.6% | 2.8% - 14.4% | 0.2% |
| Pulmonary Edema & Respiratory Failure (189) | 395 | \$52,770,435 | 3.2% | 1.2% - 5.2% | 0.2% |
| Infectious & Parasitic Diseases W O.R. Procedure (853, 854, 855) | 74 | \$52,281,089 | 1.5% | (0.6%) - 3.6% | 0.2% |
| Medical Back Problems (551, 552) | 63 | \$47,879,210 | 12.4% | 4.1% - 20.6% | 0.1% |
| Major Joint/Limb Reattachment Procedure Of Upper Extremities (483) | 62 | \$45,318,638 | 5.8% | 0.1% - 11.6% | 0.1% |
| Other Major Cardiovascular Procedures (270, 271, 272) | 46 | \$45,244,510 | 4.6% | (0.3%) - 9.5% | 0.1% |
| Cardiac Defibrillator Implant WO Cardiac Cath (226, 227) | 127 | \$44,777,494 | 10.9% | 5.9% - 16.0% | 0.1% |
| Red Blood Cell Disorders (811, 812) | 83 | \$44,375,318 | 7.2% | 1.8% - 12.5% | 0.1% |
| Perc Cardiovasc Proc W Drug-Eluting Stent (246, 247) | 96 | \$40,779,130 | 2.5% | (0.6%) - 5.6% | 0.1% |
| Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463, 464, 465) | 33 | \$40,299,084 | 6.2% | (1.7%) - 14.0% | 0.1% |
| Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066) | 144 | \$38,533,578 | 2.0% | 0.0% - 4.1% | 0.1% |
| Atherosclerosis (302, 303) | 36 | \$37,084,187 | 24.1% | 8.4% - 39.8% | 0.1% |
| Alcohol/Drug Abuse Or Dependence WO Rehabilitation Therapy (896, 897) | 65 | \$36,071,049 | 10.0% | 3.1% - 16.8% | 0.1% |
| Transient Ischemia (069) | 52 | \$35,577,400 | 13.9% | 1.5% - 26.3% | 0.1% |
| Kidney & Urinary Tract Infections (689, 690) | 147 | \$34,627,748 | 2.6% | 0.1% - 5.0% | 0.1% |
| Nonspecific Cerebrovascular Disorders (070, 071, 072) | 59 | \$33,666,109 | 9.4% | 2.6% - 16.1% | 0.1% |
| Dysequilibrium (149) | 48 | \$32,480,819 | 44.6% | 27.5% - 61.6% | 0.1% |
| Heart Failure & Shock (291, 292, 293) | 195 | \$32,051,380 | 0.9% | 0.3% - 1.5% | 0.1% |
| Major Small & Large Bowel Procedures (329, 330, 331) | 165 | \$31,935,832 | 1.4% | 0.4% - 2.4% | 0.1% |
| Fx, Sprn, Strn & Disl Except Femur, Hip, Pelvis & Thigh (562, 563) | 66 | \$29,012,157 | 11.3% | 3.3% - 19.2% | 0.1% |
| Acute Myocardial Infarction, Discharged Alive (280, 281, 282) | 165 | \$28,888,085 | 2.6% | 0.2% - 5.0% | 0.1% |
| Signs & Symptoms Of Musculoskeletal System & Conn Tissue (555, 556) | 50 | \$27,606,577 | 39.1% | 20.1% - 58.1% | 0.1% |
| Pathological Fractures & Musculoskelet & Conn Tiss Malig (542, 543, 544) | 105 | \$26,806,136 | 13.1% | 2.0% - 24.3% | 0.1% |
| Other Kidney & Urinary Tract Diagnoses (698, 699, 700) | 108 | \$26,658,234 | 3.0% | 0.0% - 5.9% | 0.1% |
| Cervical Spinal Fusion (471, 472, 473) | 67 | \$26,637,213 | 4.1% | 0.0% - 8.1% | 0.1% |
| Disorders Of Liver Except Malig,cirr,alc Hepa (441, 442, 443) | 77 | \$25,767,523 | 6.4% | (4.8%) - 17.6% | 0.1% |
| Major Chest Procedures (163, 164, 165) | 73 | \$25,523,738 | 2.7% | (0.8%) - 6.3% | 0.1% |
| Spinal Fus Exc Cerv W Spinal Curv/Malig/Infec Or Ext Fus (456, 457, 458) | 88 | \$22,883,112 | 3.4% | (1.3%) - 8.2% | 0.1% |
| Thyroid, Parathyroid & Thyroglossal Procedures (625, 626, 627) | 82 | \$21,426,473 | 49.1% | (4.8%) -102.9% | 0.1% |
| Complications Of Treatment (919, 920, 921) | 33 | \$20,676,772 | 8.2% | (0.7%) - 17.1% | 0.1% |

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Laparoscopic Cholecystectomy WO C.D.E. (417, 418, 419) | 98 | \$20,533,743 | 3.3% | 0.3% - 6.2% | 0.1% |
| Postoperative Or Post-Traumatic Infections W O.R. Proc (856, 857, 858) | 96 | \$19,871,791 | 4.2% | (0.2%) - 8.7% | 0.1% |
| Other Digestive System O.R. Procedures (356, 357, 358) | 32 | \$19,633,948 | 4.1% | (0.2%) - 8.4% | 0.1% |
| Respiratory System Diagnosis W Ventilator Support <96 Hours (208) | 74 | \$18,605,369 | 1.9% | (1.8%) - 5.7% | 0.1% |
| Chemotherapy WO Acute Leukemia As Secondary Diagnosis (846, 847, 848) | 83 | \$18,538,959 | 9.6% | 3.4% - 15.9% | 0.1% |
| Respiratory Neoplasms (180, 181, 182) | 33 | \$18,448,051 | 6.8% | (0.7%) - 14.3% | 0.1% |
| Combined Anterior/Posterior Spinal Fusion (453, 454, 455) | 91 | \$17,953,740 | 2.2% | (0.0%) - 4.4% | 0.1% |
| G.I. Obstruction (388, 389, 390) | 125 | \$17,748,621 | 2.7% | 0.0% - 5.4% | 0.1% |
| Shoulder,elbow Or Forearm Proc,exc Major Joint Proc (510, 511, 512) | 160 | \$17,402,836 | 23.9% | 1.3% - 46.6% | 0.1% |
| Traumatic Stupor & Coma, Coma <1 Hr (085, 086, 087) | 30 | \$17,378,117 | 8.5% | 1.0% - 16.1% | 0.1% |
| Bone Diseases & Arthropathies (553, 554) | 57 | \$16,248,863 | 17.8% | 7.6% - 28.1% | 0.1% |
| Cellulitis (602, 603) | 82 | \$15,937,139 | 1.9% | (1.2%) - 5.0% | 0.0% |
| Periph/Cranial Nerve & Other Nerv Syst Proc (040, 041, 042) | 87 | \$15,814,777 | 9.1% | (0.5%) - 18.7% | 0.0% |
| Skin Debridement (570, 571, 572) | 95 | \$15,360,579 | 8.3% | 0.5% - 16.1% | 0.0% |
| ECMO Or Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (003) | 50 | \$15,189,258 | 0.7% | (0.4%) - 1.8% | 0.0% |
| Stomach, Esophageal & Duodenal Proc (326, 327, 328) | 52 | \$15,151,735 | 1.7% | (0.5%) - 3.9% | 0.0% |
| Revision Of Hip Or Knee Replacement (466, 467, 468) | 79 | \$14,965,293 | 1.6% | (0.7%) - 3.9% | 0.0% |
| Other Digestive System Diagnoses (393, 394, 395) | 122 | \$14,842,316 | 2.4% | 0.1% - 4.6% | 0.0% |
| Bilateral Or Multiple Major Joint Procs Of Lower Extremity (461, 462) | 75 | \$14,372,904 | 6.2% | 1.0% - 11.3% | 0.0% |
| Bronchitis & Asthma (202, 203) | 55 | \$14,186,142 | 5.5% | 0.6% - 10.4% | 0.0% |
| Other Circulatory System O.R. Procedures (264) | 80 | \$14,103,102 | 5.7% | 1.2% - 10.2% | 0.0% |
| Other Resp System O.R. Procedures (166, 167, 168) | 36 | \$14,002,643 | 2.1% | (1.2%) - 5.5% | 0.0% |
| Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561) | 90 | \$13,916,297 | 9.5% | 0.4% - 18.5% | 0.0% |
| Hypertension (304, 305) | 81 | \$13,021,664 | 4.4% | (0.1%) - 8.9% | 0.0% |
| Coronary Bypass W Cardiac Cath (233, 234) | 101 | \$12,987,133 | 1.1% | (0.2%) - 2.5% | 0.0% |
| Extracranial Procedures (037, 038, 039) | 50 | \$12,834,771 | 3.3% | (1.2%) - 7.9% | 0.0% |
| Poisoning & Toxic Effects Of Drugs (917, 918) | 67 | \$12,624,518 | 3.5% | (1.0%) - 8.0% | 0.0% |
| Pulmonary Embolism (175, 176) | 75 | \$12,139,206 | 2.8% | (0.5%) - 6.1% | 0.0% |
| Other Respiratory System Diagnoses (205, 206) | 62 | \$11,100,882 | 6.7% | 1.6% - 11.9% | 0.0% |
| Disorders Of Pancreas Except Malignancy (438, 439, 440) | 67 | \$11,001,251 | 2.7% | (1.1%) - 6.5% | 0.0% |

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| Nervous System Neoplasms (054, 055) | 84 | \$10,559,582 | 6.7% | (0.2%) - 13.5% | 0.0% |
| Peripheral Vascular Disorders (299, 300, 301) | 65 | \$10,078,983 | 2.7% | (0.4%) - 5.7% | 0.0% |
| Other Musculoskeletal Sys & Connective Tissue Diagnoses (564, 565, 566) | 53 | \$9,364,186 | 8.7% | (2.7%) - 20.1% | 0.0% |
| Cardiac Congenital & Valvular Disorders (306, 307) | 86 | \$9,139,315 | 11.1% | (0.3%) - 22.6% | 0.0% |
| Craniotomy & Endovascular Intracranial Procedures (025, 026, 027) | 42 | \$8,959,768 | 1.0% | (0.8%) - 2.7% | 0.0% |
| AICD Generator Procedures (245) | 80 | \$8,763,698 | 10.5% | 4.3% - 16.8% | 0.0% |
| Neuroses Except Depressive (882) | 49 | \$8,708,537 | 24.1% | 9.2% - 39.0% | 0.0% |
| Perc Cardiovasc Proc WO Coronary Artery Stent (250, 251) | 58 | \$8,170,356 | 6.4% | (1.1%) - 13.9% | 0.0% |
| Hip & Femur Procedures Except Major Joint (480, 481, 482) | 143 | \$8,028,047 | 0.5% | 0.1% - 1.0% | 0.0% |
| Fractures Of Hip & Pelvis (535, 536) | 31 | \$7,772,631 | 4.9% | (1.9%) - 11.7% | 0.0% |
| Respiratory System Diagnosis W Ventilator Support >96 Hours (207) | 48 | \$6,778,936 | 0.4% | (0.4%) - 1.2% | 0.0% |
| Major Gastrointestinal Disorders & Peritoneal Infections (371, 372, 373) | 73 | \$6,162,450 | 1.3% | (0.2%) - 2.8% | 0.0% |
| Disorders Of The Biliary Tract (444, 445, 446) | 48 | \$5,961,015 | 1.9% | (1.8%) - 5.5% | 0.0% |
| Biopsies Of Musculoskeletal System & Connective Tissue (477, 478, 479) | 56 | \$5,373,583 | 3.1% | (0.5%) - 6.6% | 0.0% |
| Knee Procedures WO PDX Of Infection (488, 489) | 83 | \$3,046,293 | 5.3% | 0.9% - 9.7% | 0.0% |
| Percutaneous Intracardiac Procedures (273, 274) | 42 | \$2,635,076 | 0.4% | (0.1%) - 0.9% | 0.0% |
| Cranial/Facial Procedures (131, 132) | 81 | \$1,185,842 | 3.3% | (0.3%) - 6.9% | 0.0% |
| Cholecystectomy Except By Laparoscope WO C.D.E. (414, 415, 416) | 57 | \$420,691 | 0.3% | (0.3%) - 1.0% | 0.0% |
| Septicemia Or Severe Sepsis W MV >96 Hours (870) | 47 | \$369,284 | 0.0% | (0.0%) - 0.1% | 0.0% |
| Rectal Resection (332, 333, 334) | 86 | \$314,628 | 1.4% | (0.9%) - 3.8% | 0.0% |
| Permanent Cardiac Pacemaker Implant (242, 243, 244) | 66 | N/A | 0.0% | N/A | N/A |
| All Type of Services (Incl. Codes Not Listed) | 13,499 | \$5,548,362,053 | 4.8% | 4.4% - 5.2% | 17.2% |

Appendix H: Projected Improper Payments by Referring Provider Type for Specific Types of Service

This series of tables is sorted in descending order by projected improper payments. All estimates in these tables are based on a minimum of 30 lines in the sample.

Table H1: Improper Payment Rates for Lab tests - other (non-Medicare fee schedule) by Referring Provider

| Lab tests - other (non-Medicare fee schedule) | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Internal Medicine | 1,094 | \$287,512,166 | 22.4% | 17.3% - 27.6% | 29.3% |
| Family Practice | 806 | \$227,226,379 | 35.9% | 24.9% - 46.9% | 23.1% |
| Anesthesiology | 296 | \$73,104,762 | 73.2% | 65.2% - 81.2% | 7.4% |
| Nurse Practitioner | 368 | \$67,193,092 | 30.5% | 18.6% - 42.4% | 6.8% |
| Psychiatry | 151 | \$43,474,225 | 33.7% | (8.2%) - 75.6% | 4.4% |
| General Surgery | 107 | \$38,179,055 | 70.7% | 39.9% -101.6% | 3.9% |
| No Referring Provider Type | 198 | \$34,358,915 | 25.7% | 8.3% - 43.2% | 3.5% |
| Physical Medicine and Rehabilitation | 175 | \$33,317,154 | 70.7% | 59.5% - 81.9% | 3.4% |
| Interventional Pain Management | 162 | \$29,956,039 | 49.4% | 16.3% - 82.4% | 3.1% |
| General Practice | 70 | \$25,263,189 | 26.6% | (2.0%) - 55.2% | 2.6% |
| Physician Assistant | 192 | \$23,464,846 | 26.5% | 13.6% - 39.5% | 2.4% |
| Cardiology | 121 | \$21,557,646 | 17.1% | 6.6% - 27.6% | 2.2% |
| Pain Management | 82 | \$18,035,804 | 73.8% | 61.2% - 86.4% | 1.8% |
| Obstetrics/Gynecology | 35 | \$16,741,133 | 24.9% | (5.2%) - 55.1% | 1.7% |
| Urology | 129 | \$15,578,363 | 20.1% | 9.2% - 31.0% | 1.6% |
| Neurology | 72 | \$7,901,894 | 37.2% | 12.7% - 61.6% | 0.8% |
| Gastroenterology | 68 | \$6,408,367 | 9.6% | (1.7%) - 20.9% | 0.7% |
| Emergency Medicine | 35 | \$2,557,182 | 19.3% | (2.7%) - 41.3% | 0.3% |
| All Referring Providers | 4,287 | \$981,823,792 | 29.8% | 25.7% - 33.9% | 100.0% |

Table H2: Improper Payment Rates for Office visits - established by Provider Type

| Office visits - established | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|-----------------------------|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Internal Medicine | 249 | \$147,797,268 | 5.2% | 3.1% - 7.3% | 14.1% |

| Office visits - established | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|-----------------------------|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Family Practice | 224 | \$139,306,453 | 5.3% | 2.8% - 7.8% | 13.3% |
| Dermatology | 49 | \$83,712,700 | 15.7% | 4.9% - 26.4% | 8.0% |
| Nurse Practitioner | 101 | \$53,803,083 | 6.2% | 3.1% - 9.3% | 5.1% |
| Cardiology | 94 | \$49,780,288 | 4.9% | 2.2% - 7.5% | 4.7% |
| Psychiatry | 53 | \$47,003,473 | 11.8% | 2.9% - 20.8% | 4.5% |
| Orthopedic Surgery | 53 | \$46,709,593 | 9.5% | 3.2% - 15.8% | 4.4% |
| Urology | 41 | \$42,898,603 | 9.1% | (0.2%) - 18.3% | 4.1% |
| Podiatry | 38 | \$37,841,461 | 11.5% | 1.0% - 22.1% | 3.6% |
| Neurology | 30 | \$33,452,605 | 10.0% | (1.1%) - 21.1% | 3.2% |
| Physician Assistant | 53 | \$31,620,939 | 6.9% | 1.1% - 12.8% | 3.0% |
| Otolaryngology | 33 | \$26,029,211 | 11.1% | 0.5% - 21.7% | 2.5% |
| Hematology/Oncology | 50 | \$25,341,184 | 4.7% | 0.9% - 8.4% | 2.4% |
| All Provider Types | 1,461 | \$1,050,386,680 | 7.1% | 6.0% - 8.2% | 100.0% |

Table H3: Improper Payment Rates for Hospital visit - subsequent by Provider Type

| Hospital visit - subsequent | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|--------------------------------------|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Internal Medicine | 626 | \$242,034,784 | 11.5% | 9.2% - 13.7% | 31.6% |
| Family Practice | 117 | \$78,333,493 | 20.8% | 11.1% - 30.5% | 10.2% |
| Cardiology | 129 | \$74,398,532 | 16.4% | 8.4% - 24.5% | 9.7% |
| Psychiatry | 65 | \$49,416,408 | 17.8% | 9.1% - 26.5% | 6.4% |
| Pulmonary Disease | 93 | \$44,515,507 | 14.6% | 6.0% - 23.3% | 5.8% |
| Nephrology | 87 | \$40,487,033 | 10.6% | 5.6% - 15.7% | 5.3% |
| Nurse Practitioner | 64 | \$30,265,056 | 15.9% | 5.3% - 26.5% | 3.9% |
| Infectious Disease | 59 | \$28,245,503 | 11.7% | 2.9% - 20.4% | 3.7% |
| Neurology | 40 | \$27,184,539 | 17.6% | 8.4% - 26.7% | 3.5% |
| Physical Medicine and Rehabilitation | 46 | \$25,607,747 | 13.2% | 5.5% - 20.8% | 3.3% |
| Hematology/Oncology | 31 | \$8,988,060 | 9.3% | 1.6% - 17.0% | 1.2% |
| Physician Assistant | 34 | \$6,982,474 | 9.5% | 2.7% - 16.3% | 0.9% |
| All Provider Types | 1,567 | \$767,051,514 | 14.2% | 12.4% - 16.0% | 100.0% |

Table H4: Improper Payment Rates for Oxygen Supplies/Equipment by Referring Provider

| Oxygen Supplies/Equipment | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|--------------------------------|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Internal Medicine | 643 | \$153,500,450 | 40.3% | 35.4% - 45.1% | 52.8% |
| Family Practice | 283 | \$82,544,575 | 48.0% | 40.8% - 55.3% | 28.4% |
| Nurse Practitioner | 103 | \$22,501,010 | 37.3% | 25.6% - 48.9% | 7.7% |
| Physician Assistant | 42 | \$7,871,846 | 33.2% | 16.6% - 49.8% | 2.7% |
| All Referring Providers | 1,157 | \$290,625,427 | 42.4% | 38.8% - 46.0% | 100.0% |

Table H5: Improper Payment Rates for CPAP by Referring Provider

| CPAP | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Type of Service Improper Payments |
|--------------------------------|-----------------|-----------------------------|-----------------------|-------------------------|--|
| Internal Medicine | 632 | \$136,901,081 | 39.9% | 33.6% - 46.2% | 54.0% |
| Family Practice | 184 | \$44,518,645 | 49.0% | 37.9% - 60.1% | 17.6% |
| Neurology | 74 | \$15,213,900 | 45.4% | 27.8% - 63.0% | 6.0% |
| No Referring Provider Type | 42 | \$13,394,389 | 49.5% | 21.5% - 77.6% | 5.3% |
| Neuropsychiatry | 37 | \$11,825,982 | 43.5% | 13.1% - 73.8% | 4.7% |
| Nurse Practitioner | 103 | \$10,363,915 | 24.9% | 11.8% - 37.9% | 4.1% |
| Physician Assistant | 42 | \$7,348,422 | 31.1% | 10.6% - 51.7% | 2.9% |
| All Referring Providers | 1,172 | \$253,477,201 | 41.4% | 36.7% - 46.1% | 100.0% |

Appendix I: Projected Improper Payments by Provider Type for Each Claim Type

This series of tables is sorted in descending order by projected improper payments. All estimates in these tables are based on a minimum of 30 lines in the sample.

Table I1: Improper Payment Rates and Amounts by Provider Type: Part B²⁵

| Providers Billing to Part B | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Provider Compliance Improper Payment Rate | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|---|--------------------------------------|
| Internal Medicine | 1,941 | \$1,489,011,538 | 15.7% | 9.9% - 21.4% | 23.1% | 4.6% |
| Clinical Laboratory (Billing Independently) | 3,569 | \$964,604,024 | 28.2% | 24.2% - 32.2% | 32.1% | 3.0% |
| Family Practice | 994 | \$727,702,654 | 13.6% | 10.8% - 16.3% | 19.7% | 2.3% |
| Ambulance Service Supplier (e.g., private ambulance companies) | 646 | \$599,536,134 | 13.4% | 10.2% - 16.6% | 21.2% | 1.9% |
| Rheumatology | 142 | \$430,893,498 | 28.7% | (6.3%) - 63.8% | 42.5% | 1.3% |
| Cardiology | 693 | \$429,959,575 | 10.9% | 8.4% - 13.5% | 20.0% | 1.3% |
| Physical Therapist in Private Practice | 563 | \$373,637,159 | 17.0% | 13.1% - 20.8% | 22.8% | 1.2% |
| Ambulatory Surgical Center | 129 | \$305,893,313 | 11.4% | 3.2% - 19.5% | 38.5% | 0.9% |
| Medical Oncology | 112 | \$268,472,362 | 12.7% | (6.1%) - 31.5% | 12.9% | 0.8% |
| Diagnostic Radiology | 873 | \$264,698,368 | 6.9% | 4.6% - 9.3% | 15.0% | 0.8% |
| Chiropractic | 388 | \$260,878,720 | 41.0% | 34.5% - 47.5% | 42.6% | 0.8% |
| Emergency Medicine | 497 | \$257,364,798 | 11.3% | 9.2% - 13.3% | 19.3% | 0.8% |
| Nurse Practitioner | 703 | \$244,535,402 | 10.0% | 7.8% - 12.3% | 18.9% | 0.8% |
| Psychiatry | 293 | \$233,791,105 | 23.9% | 16.0% - 31.8% | 35.0% | 0.7% |
| Nephrology | 299 | \$222,039,769 | 10.5% | 6.5% - 14.4% | 13.1% | 0.7% |
| All Provider Types With Less Than 30 Claims | 258 | \$219,440,875 | 2.9% | 0.8% - 5.1% | 4.5% | 0.7% |
| Podiatry | 226 | \$188,977,213 | 13.7% | 8.2% - 19.3% | 22.2% | 0.6% |
| Dermatology | 204 | \$181,187,310 | 7.2% | 2.3% - 12.0% | 8.8% | 0.6% |
| Orthopedic Surgery | 158 | \$162,956,913 | 5.1% | 2.3% - 7.9% | 17.7% | 0.5% |
| IDTF | 57 | \$159,406,897 | 16.8% | 2.8% - 30.9% | 23.5% | 0.5% |
| Neurology | 196 | \$155,297,730 | 6.0% | 0.9% - 11.1% | 9.3% | 0.5% |
| Physician Assistant | 301 | \$153,910,008 | 10.5% | 5.8% - 15.3% | 18.9% | 0.5% |
| Ophthalmology | 473 | \$153,238,631 | 3.2% | 1.6% - 4.7% | 10.8% | 0.5% |
| Radiation Oncology | 60 | \$151,911,093 | 10.8% | (0.8%) - 22.3% | 14.3% | 0.5% |

²⁵ The dollars in error for the improper payment rate are based on the final allowed charges. The dollars in error for the provider compliance improper payment rate are based on initial allowed charges, which excludes MAC reductions and denials. The provider compliance rate is what the improper payment rate would be without MAC activities.

| Providers Billing to Part B | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Provider Compliance Improper Payment Rate | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|---|--------------------------------------|
| Cardiac Electrophysiology | 69 | \$142,557,526 | 33.0% | 10.8% - 55.2% | 35.6% | 0.4% |
| Hematology/Oncology | 355 | \$140,461,640 | 3.0% | 0.8% - 5.1% | 4.9% | 0.4% |
| Anesthesiology | 267 | \$132,952,732 | 7.8% | 2.2% - 13.4% | 15.1% | 0.4% |
| Urology | 145 | \$130,865,866 | 7.6% | 2.5% - 12.7% | 16.0% | 0.4% |
| Clinical Psychologist | 96 | \$130,213,007 | 23.5% | 11.8% - 35.3% | 28.6% | 0.4% |
| Pulmonary Disease | 222 | \$128,919,204 | 10.3% | 6.6% - 14.0% | 15.7% | 0.4% |
| Physical Medicine and Rehabilitation | 239 | \$89,924,546 | 10.0% | 6.3% - 13.7% | 12.2% | 0.3% |
| Infectious Disease | 119 | \$83,826,236 | 10.4% | 2.4% - 18.4% | 15.4% | 0.3% |
| Pathology | 163 | \$81,788,708 | 7.9% | 1.8% - 14.0% | 15.0% | 0.3% |
| Gastroenterology | 142 | \$79,979,247 | 5.7% | 3.5% - 7.9% | 10.6% | 0.2% |
| Otolaryngology | 58 | \$74,134,664 | 11.4% | 4.8% - 17.9% | 24.6% | 0.2% |
| General Surgery | 134 | \$72,423,611 | 4.6% | 2.2% - 7.0% | 20.3% | 0.2% |
| Endocrinology | 72 | \$63,780,376 | 11.7% | 4.7% - 18.6% | 13.3% | 0.2% |
| Clinical Social Worker | 115 | \$58,966,217 | 16.6% | 9.0% - 24.1% | 28.6% | 0.2% |
| Interventional Pain Management | 158 | \$53,320,410 | 17.1% | 6.0% - 28.2% | 21.4% | 0.2% |
| Occupational Therapist in Private Practice | 57 | \$51,484,154 | 25.8% | 9.4% - 42.2% | 37.0% | 0.2% |
| General Practice | 73 | \$49,129,778 | 15.8% | 5.0% - 26.6% | 41.8% | 0.2% |
| Optometry | 144 | \$44,925,308 | 4.4% | 0.9% - 7.8% | 12.5% | 0.1% |
| Obstetrics/Gynecology | 45 | \$42,844,861 | 7.7% | 0.8% - 14.7% | 23.3% | 0.1% |
| Allergy/Immunology | 38 | \$39,335,951 | 4.5% | (0.6%) - 9.6% | 9.7% | 0.1% |
| Geriatric Medicine | 37 | \$37,658,962 | 19.9% | 0.8% - 39.1% | 24.5% | 0.1% |
| Unknown Provider Type | 126 | \$35,084,165 | 4.1% | 1.6% - 6.6% | 5.3% | 0.1% |
| Vascular Surgery | 64 | \$28,209,950 | 5.1% | 0.2% - 9.9% | 8.3% | 0.1% |
| Certified Registered Nurse Anesthetist | 68 | \$27,882,082 | 4.0% | (1.5%) - 9.5% | 8.2% | 0.1% |
| Critical Care (Intensivists) | 59 | \$20,745,868 | 11.1% | 2.4% - 19.8% | 20.9% | 0.1% |
| Pain Management | 130 | \$17,614,379 | 12.5% | 2.0% - 23.0% | 37.2% | 0.1% |
| Interventional Radiology | 32 | \$13,958,467 | 1.7% | (1.4%) - 4.7% | 0.9% | 0.0% |
| Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations) | 49 | \$0 | 0.0% | 0.0% - 0.0% | 0.0% | 0.0% |
| Overall (Incl. Codes Not Listed) | 17,037 | \$10,472,333,004 | 10.7% | 9.3% - 12.0% | 17.5% | 32.5% |

Table I2: Improper Payment Rates and Amounts by Provider Type²⁶: DMEPOS²⁷

| Providers Billing to DMEPOS | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Provider Compliance Improper Payment Rate | Percent of Overall Improper Payments |
|--|-----------------|-----------------------------|-----------------------|-------------------------|---|--------------------------------------|
| Medical supply company not included in 51, 52, or 53 | 4,540 | \$1,230,792,467 | 40.4% | 37.8% - 42.9% | 42.9% | 3.8% |
| Pharmacy | 3,913 | \$628,066,325 | 25.9% | 23.0% - 28.8% | 29.8% | 1.9% |
| Medical Supply Company with Respiratory Therapist | 1,137 | \$233,952,148 | 41.8% | 37.4% - 46.1% | 45.4% | 0.7% |
| Podiatry | 147 | \$93,824,689 | 82.1% | 73.6% - 90.5% | 83.0% | 0.3% |
| All Provider Types With Less Than 30 Claims | 275 | \$90,885,436 | 53.5% | 42.8% - 64.1% | 56.1% | 0.3% |
| Individual orthotic personnel certified by an accrediting organization | 130 | \$57,394,871 | 24.1% | 4.3% - 43.8% | 30.5% | 0.2% |
| Individual prosthetic personnel certified by an accrediting organization | 129 | \$54,372,096 | 22.4% | 11.3% - 33.6% | 27.7% | 0.2% |
| Orthopedic Surgery | 171 | \$51,839,376 | 65.3% | 52.2% - 78.4% | 66.6% | 0.2% |
| Medical supply company with orthotic personnel certified by an accrediting organization | 167 | \$34,309,277 | 27.6% | 15.8% - 39.5% | 31.0% | 0.1% |
| General Practice | 84 | \$26,861,259 | 78.0% | 64.2% - 91.8% | 83.7% | 0.1% |
| Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization | 107 | \$24,803,988 | 21.4% | 11.8% - 31.0% | 32.2% | 0.1% |
| Optometry | 39 | \$18,330,079 | 92.3% | 83.6% -100.9% | 90.7% | 0.1% |
| Medical supply company with prosthetic personnel certified by an accrediting organization | 48 | \$18,128,247 | 33.6% | 10.0% - 57.2% | 38.4% | 0.1% |
| Multispecialty Clinic or Group Practice | 38 | \$15,267,522 | 59.5% | 21.0% - 98.0% | 60.4% | 0.0% |
| Supplier of oxygen and/or oxygen related equipment | 56 | \$9,424,959 | 35.2% | 16.7% - 53.7% | 37.9% | 0.0% |
| Overall (Incl. Codes Not Listed) | 10,981 | \$2,588,252,739 | 35.5% | 33.7% - 37.3% | 39.1% | 8.0% |

²⁶ Herein, “provider” will be used to refer to both providers and suppliers in DMEPOS provider type reporting.

²⁷ The dollars in error for the improper payment rate are based on the final allowed charges. The dollars in error for the provider compliance improper payment rate are based on initial allowed charges, which excludes MAC reductions and denials. The provider compliance rate is what the improper payment rate would be without MAC activities.

Table I3: Improper Payment Rates and Amounts by Provider Type: Part A Excluding Hospital IPPS

| Providers Billing to Part A Excluding Hospital IPPS | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| HHA | 1,179 | \$3,159,762,318 | 17.6% | 15.3% - 20.0% | 9.8% |
| SNF | 1,757 | \$2,220,402,164 | 6.5% | 5.1% - 8.0% | 6.9% |
| OPPS, Laboratory, Ambulatory | 2,396 | \$2,192,249,047 | 3.3% | 2.4% - 4.1% | 6.8% |
| Hospice | 920 | \$2,055,986,549 | 11.7% | 9.4% - 13.9% | 6.4% |
| Inpatient Rehabilitation Hospitals | 261 | \$1,686,466,985 | 43.9% | 37.1% - 50.8% | 5.2% |
| Inpatient Rehab Unit | 224 | \$1,250,243,034 | 38.7% | 31.5% - 46.0% | 3.9% |
| ESRD | 612 | \$394,644,185 | 3.5% | 2.1% - 5.0% | 1.2% |
| Critical Access Hospital Outpatient Services | 275 | \$386,619,186 | 6.1% | 2.8% - 9.5% | 1.2% |
| Inpatient Critical Access Hospital | 383 | \$71,734,327 | 3.0% | 1.4% - 4.6% | 0.2% |
| All Codes With Less Than 30 Claims | 9 | \$59,491,647 | 54.3% | 7.2% -101.4% | 0.2% |
| ORF | 48 | \$50,728,222 | 8.6% | (0.2%) - 17.3% | 0.2% |
| RHCs | 211 | \$38,030,705 | 3.0% | 0.7% - 5.3% | 0.1% |
| FQHC | 75 | \$17,783,129 | 1.6% | (1.5%) - 4.7% | 0.1% |
| Non PPS Short Term Hospital Inpatient | 52 | \$11,929,410 | 1.1% | (0.3%) - 2.6% | 0.0% |
| CORF | 73 | \$6,229,586 | 25.5% | 9.5% - 41.4% | 0.0% |
| Other FI Service Types | 5 | \$0 | 0.0% | 0.0% - 0.0% | 0.0% |
| Overall (Incl. Codes Not Listed) | 8,480 | \$13,602,300,496 | 8.1% | 7.3% - 8.8% | 42.2% |

Table I4: Improper Payment Rates and Amounts by Provider Type: Part A Hospital IPPS

| Providers Billing to Part A Hospital IPPS | Claims Reviewed | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percent of Overall Improper Payments |
|---|-----------------|-----------------------------|-----------------------|-------------------------|--------------------------------------|
| DRG Short Term | 12,458 | \$4,798,299,620 | 4.4% | 4.0% - 4.8% | 14.9% |
| Other FI Service Types | 847 | \$654,187,661 | 16.4% | 12.7% - 20.1% | 2.0% |
| DRG Long Term | 194 | \$95,874,772 | 3.0% | 0.6% - 5.5% | 0.3% |
| Overall (Incl. Codes Not Listed) | 13,499 | \$5,548,362,053 | 4.8% | 4.4% - 5.2% | 17.2% |

Appendix J: Improper Payment Rates and Type of Error by Provider Type for Each Claim Type

Table J1: Improper Payment Rates by Provider Type and Type of Error: Part B

| Provider Types Billing to Part B | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|--|-----------------------|-----------------|--|------------------|-------------------|------------------|-------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| Chiropractic | 41.0% | 388 | 0.0% | 88.3% | 7.7% | 4.0% | 0.0% |
| Cardiac Electrophysiology | 33.0% | 69 | 46.9% | 44.5% | 0.0% | 8.6% | 0.0% |
| Rheumatology | 28.7% | 142 | 0.0% | 13.3% | 0.1% | 1.0% | 85.7% |
| Clinical Laboratory (Billing Independently) | 28.2% | 3,569 | 0.5% | 91.6% | 6.4% | 0.3% | 1.2% |
| Occupational Therapist in Private Practice | 25.8% | 57 | 7.0% | 63.1% | 21.6% | 5.7% | 2.6% |
| Psychiatry | 23.9% | 293 | 8.2% | 47.8% | 0.4% | 32.5% | 11.1% |
| Clinical Psychologist | 23.5% | 96 | 5.7% | 90.5% | 0.0% | 0.0% | 3.8% |
| Geriatric Medicine | 19.9% | 37 | 0.0% | 65.4% | 0.3% | 34.3% | 0.0% |
| Interventional Pain Management | 17.1% | 158 | 0.0% | 83.3% | 0.0% | 16.6% | 0.0% |
| Physical Therapist in Private Practice | 17.0% | 563 | 1.6% | 97.1% | 0.2% | 1.0% | 0.0% |
| IDTF | 16.8% | 57 | 0.0% | 99.8% | 0.2% | 0.0% | 0.0% |
| Clinical Social Worker | 16.6% | 115 | 2.6% | 95.7% | 0.0% | 1.7% | 0.0% |
| General Practice | 15.8% | 73 | 0.0% | 48.2% | 0.0% | 51.8% | 0.0% |
| Internal Medicine | 15.7% | 1,941 | 2.0% | 60.8% | 0.3% | 36.2% | 0.8% |
| Podiatry | 13.7% | 226 | 2.3% | 78.2% | 0.0% | 19.5% | 0.0% |
| Family Practice | 13.6% | 994 | 7.4% | 61.7% | 0.5% | 27.5% | 2.8% |
| Ambulance Service Supplier (e.g., private ambulance companies) | 13.4% | 646 | 0.0% | 68.9% | 23.8% | 5.4% | 1.9% |
| Medical Oncology | 12.7% | 112 | 2.2% | 90.0% | 0.0% | 7.8% | 0.0% |
| Pain Management | 12.5% | 130 | 0.0% | 77.9% | 0.2% | 21.8% | 0.0% |
| Endocrinology | 11.7% | 72 | 0.0% | 51.7% | 0.2% | 48.1% | 0.0% |
| Ambulatory Surgical Center | 11.4% | 129 | 0.0% | 83.0% | 17.0% | 0.0% | 0.0% |
| Otolaryngology | 11.4% | 58 | 0.0% | 35.5% | 0.0% | 64.5% | 0.0% |
| Emergency Medicine | 11.3% | 497 | 3.4% | 14.9% | 0.0% | 81.7% | 0.0% |
| Critical Care (Intensivists) | 11.1% | 59 | 0.0% | 64.3% | 0.0% | 35.7% | 0.0% |
| Cardiology | 10.9% | 693 | 6.3% | 55.2% | 0.1% | 36.5% | 1.8% |
| Radiation Oncology | 10.8% | 60 | 0.0% | 96.9% | 0.5% | 2.6% | 0.0% |
| Physician Assistant | 10.5% | 301 | 1.9% | 46.8% | 0.0% | 43.0% | 8.3% |

| Provider Types Billing to Part B | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|---|-----------------------|-----------------|--|------------------|-------------------|------------------|-------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| Nephrology | 10.5% | 299 | 1.2% | 49.8% | 0.0% | 49.0% | 0.0% |
| Infectious Disease | 10.4% | 119 | 9.3% | 43.8% | 0.0% | 46.9% | 0.0% |
| Pulmonary Disease | 10.3% | 222 | 6.3% | 39.0% | 0.0% | 54.7% | 0.0% |
| Nurse Practitioner | 10.0% | 703 | 4.9% | 44.5% | 1.3% | 46.7% | 2.7% |
| Physical Medicine and Rehabilitation | 10.0% | 239 | 0.0% | 45.0% | 0.0% | 54.6% | 0.4% |
| Pathology | 7.9% | 163 | 0.0% | 99.0% | 0.8% | 0.2% | 0.0% |
| Anesthesiology | 7.8% | 267 | 0.0% | 91.9% | 0.0% | 8.1% | 0.0% |
| Obstetrics/Gynecology | 7.7% | 45 | 13.2% | 36.4% | 0.0% | 50.4% | 0.0% |
| Urology | 7.6% | 145 | 21.7% | 48.2% | 0.0% | 29.4% | 0.7% |
| Dermatology | 7.2% | 204 | 10.3% | 60.3% | 11.4% | 18.0% | 0.0% |
| Diagnostic Radiology | 6.9% | 873 | 2.5% | 93.9% | 0.0% | 1.8% | 1.7% |
| Neurology | 6.0% | 196 | 5.5% | 39.0% | 0.0% | 55.5% | 0.0% |
| Gastroenterology | 5.7% | 142 | 0.0% | 32.0% | 0.0% | 68.0% | 0.0% |
| Orthopedic Surgery | 5.1% | 158 | 0.0% | 58.5% | 0.0% | 41.4% | 0.1% |
| Vascular Surgery | 5.1% | 64 | 8.3% | 46.6% | 0.0% | 45.1% | 0.0% |
| General Surgery | 4.6% | 134 | 0.2% | 47.0% | 0.0% | 52.7% | 0.0% |
| Allergy/Immunology | 4.5% | 38 | 0.0% | 90.7% | 0.0% | 9.3% | 0.0% |
| Optometry | 4.4% | 144 | 0.0% | 69.7% | 0.0% | 22.5% | 7.8% |
| Unknown Provider Type | 4.1% | 126 | 20.5% | 19.4% | 0.0% | 60.1% | 0.0% |
| Certified Registered Nurse Anesthetist | 4.0% | 68 | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| Ophthalmology | 3.2% | 473 | 0.0% | 62.3% | 0.0% | 37.5% | 0.2% |
| Hematology/Oncology | 3.0% | 355 | 3.2% | 60.5% | 1.6% | 34.7% | 0.0% |
| All Provider Types With Less Than 30 Claims | 2.9% | 258 | 2.3% | 70.4% | 0.0% | 27.3% | 0.0% |
| Interventional Radiology | 1.7% | 32 | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations) | 0.0% | 49 | N/A | N/A | N/A | N/A | N/A |
| All Provider Types | 10.7% | 17,037 | 3.4% | 65.2% | 3.1% | 23.6% | 4.7% |

Table J2: Improper Payment Rates by Provider Type and Type of Error: DMEPOS

| Provider Types Billing to DMEPOS | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|----------------------------------|-----------------------|-----------------|--|------------------|-------------------|------------------|-------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| Optometry | 92.3% | 39 | 1.8% | 66.1% | 3.7% | 0.0% | 28.4% |

| Provider Types Billing to DMEPOS | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|--|-----------------------|-----------------|--|------------------|-------------------|------------------|--------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| Podiatry | 82.1% | 147 | 1.8% | 88.1% | 1.5% | 0.0% | 8.6% |
| General Practice | 78.0% | 84 | 2.8% | 77.8% | 5.2% | 0.0% | 14.2% |
| Orthopedic Surgery | 65.3% | 171 | 0.7% | 84.8% | 7.9% | 0.0% | 6.6% |
| Multispecialty Clinic or Group Practice | 59.5% | 38 | 2.2% | 94.8% | 0.0% | 0.0% | 2.9% |
| All Provider Types With Less Than 30 Claims | 53.5% | 275 | 0.4% | 79.2% | 7.9% | 0.0% | 12.5% |
| Medical Supply Company with Respiratory Therapist | 41.8% | 1,137 | 4.2% | 83.2% | 0.3% | 0.0% | 12.2% |
| Medical supply company not included in 51, 52, or 53 | 40.4% | 4,540 | 4.0% | 78.6% | 2.6% | 0.3% | 14.6% |
| Supplier of oxygen and/or oxygen related equipment | 35.2% | 56 | 0.0% | 89.2% | 0.0% | 0.0% | 10.8% |
| Medical supply company with prosthetic personnel certified by an accrediting organization | 33.6% | 48 | 0.0% | 78.7% | 0.0% | 0.0% | 21.3% |
| Medical supply company with orthotic personnel certified by an accrediting organization | 27.6% | 167 | 3.5% | 53.0% | 18.5% | 0.0% | 25.0% |
| Pharmacy | 25.9% | 3,913 | 3.9% | 71.7% | 1.8% | 1.1% | 21.5% |
| Individual orthotic personnel certified by an accrediting organization | 24.1% | 130 | 5.5% | 87.1% | 0.6% | 0.2% | 6.7% |
| Individual prosthetic personnel certified by an accrediting organization | 22.4% | 129 | 0.0% | 89.9% | 0.0% | 0.0% | 10.1% |
| Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization | 21.4% | 107 | 0.0% | 91.2% | 0.0% | 0.0% | 8.8% |
| All Provider Types | 35.5% | 10,981 | 3.5% | 78.1% | 2.5% | 0.4% | 15.5% |

Table J3: Improper Payment Rates by Provider Type and Type of Error: Part A Excluding Hospital IPPS

| Provider Types Billing to Part A Excluding Hospital IPPS | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|--|-----------------------|-----------------|--|------------------|-------------------|------------------|-------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| All Codes With Less Than 30 Claims | 54.3% | 9 | 0.0% | 85.8% | 14.2% | 0.0% | 0.0% |
| Inpatient Rehabilitation Hospitals | 43.9% | 261 | 0.2% | 11.7% | 88.1% | 0.0% | 0.0% |
| Inpatient Rehab Unit | 38.7% | 224 | 0.0% | 24.2% | 75.8% | 0.0% | 0.0% |
| CORF | 25.5% | 73 | 0.0% | 91.1% | 0.0% | 0.9% | 8.0% |
| HHA | 17.6% | 1,179 | 2.0% | 61.9% | 19.3% | 0.5% | 16.2% |
| Hospice | 11.7% | 920 | 4.6% | 60.2% | 24.7% | 10.4% | 0.2% |
| ORF | 8.6% | 48 | 0.0% | 63.3% | 0.0% | 0.7% | 36.0% |
| SNF | 6.5% | 1,757 | 2.3% | 80.9% | 2.0% | 4.5% | 10.3% |
| Critical Access Hospital Outpatient Services | 6.1% | 275 | 0.0% | 88.4% | 8.4% | 2.3% | 0.9% |

| Provider Types Billing to Part A Excluding Hospital IPPS | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|--|-----------------------|-----------------|--|------------------|-------------------|------------------|-------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| ESRD | 3.5% | 612 | 0.0% | 99.6% | 0.0% | 0.0% | 0.4% |
| OPPS, Laboratory, Ambulatory | 3.3% | 2,396 | 2.1% | 85.1% | 1.3% | 3.0% | 8.6% |
| RHCs | 3.0% | 211 | 17.4% | 70.6% | 0.0% | 0.0% | 12.0% |
| Inpatient Critical Access Hospital | 3.0% | 383 | 0.0% | 19.0% | 79.2% | 0.0% | 1.7% |
| FQHC | 1.6% | 75 | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |
| Non PPS Short Term Hospital Inpatient | 1.1% | 52 | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% |
| Other FI Service Types | 0.0% | 5 | N/A | N/A | N/A | N/A | N/A |
| All Provider Types | 8.1% | 8,480 | 1.9% | 60.6% | 27.4% | 3.0% | 7.1% |

Table J4: Improper Payment Rates by Provider Type and Type of Error: Part A Hospital IPPS

| Provider Types Billing to Part A Hospital IPPS | Improper Payment Rate | Claims Reviewed | Percentage of Provider Type Improper Payments by Type of Error | | | | |
|--|-----------------------|-----------------|--|------------------|-------------------|------------------|-------------|
| | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other |
| Other FI Service Types | 16.4% | 847 | 0.0% | 69.6% | 24.9% | 0.1% | 5.4% |
| DRG Short Term | 4.4% | 12,458 | 1.8% | 16.4% | 61.8% | 18.2% | 1.8% |
| DRG Long Term | 3.0% | 194 | 7.1% | 0.0% | 85.9% | 7.0% | 0.0% |
| All Provider Types | 4.8% | 13,499 | 1.6% | 22.4% | 57.9% | 15.9% | 2.2% |

Appendix K: Coding Information

Table K1: E&M Services by Improper Payment Rates and Amounts and Type of Error

| E & M Codes | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|-------------------------------------|-----------------------------|-----------------------|-------------------------|--|------------------|-------------------|------------------|-------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Initial hospital care (99223) | \$456,023,354 | 27.2% | 24.8% - 29.6% | 5.0% | 22.0% | 0.0% | 73.0% | 0.0% | 1.4% |
| Office/outpatient visit est (99214) | \$389,471,370 | 4.8% | 3.4% - 6.3% | 10.3% | 18.4% | 5.3% | 65.9% | 0.0% | 1.2% |
| Subsequent hospital care (99233) | \$365,020,327 | 19.1% | 16.8% - 21.4% | 6.4% | 24.2% | 0.0% | 69.3% | 0.0% | 1.1% |
| Office/outpatient visit est (99213) | \$354,597,067 | 6.7% | 5.0% - 8.5% | 3.1% | 29.1% | 0.0% | 64.3% | 3.5% | 1.1% |
| All Codes With Less Than 30 Claims | \$333,874,328 | 27.5% | 20.0% - 34.9% | 2.9% | 79.3% | 2.8% | 3.5% | 11.5% | 1.0% |
| Emergency dept visit (99285) | \$221,435,674 | 14.2% | 12.0% - 16.3% | 0.0% | 5.4% | 0.0% | 94.6% | 0.0% | 0.7% |
| Subsequent hospital care (99232) | \$202,686,980 | 7.9% | 5.2% - 10.6% | 21.8% | 59.0% | 0.0% | 19.2% | 0.0% | 0.6% |
| Critical care first hour (99291) | \$183,468,482 | 19.0% | 14.5% - 23.6% | 5.8% | 35.3% | 0.0% | 58.8% | 0.1% | 0.6% |
| Office/outpatient visit new (99204) | \$179,902,093 | 15.0% | 11.9% - 18.2% | 0.0% | 6.5% | 0.0% | 93.5% | 0.0% | 0.6% |
| Initial hospital care (99222) | \$136,502,521 | 18.7% | 14.5% - 22.9% | 0.0% | 31.0% | 0.0% | 69.0% | 0.0% | 0.4% |
| Office/outpatient visit est (99215) | \$133,110,410 | 13.0% | 10.2% - 15.9% | 2.4% | 5.5% | 0.0% | 92.1% | 0.0% | 0.4% |
| Office/outpatient visit est (99212) | \$120,969,362 | 30.6% | 20.6% - 40.5% | 4.0% | 20.2% | 0.0% | 72.6% | 3.2% | 0.4% |
| Initial observation care (99220) | \$82,565,581 | 40.2% | 31.3% - 49.2% | 0.0% | 80.0% | 0.0% | 20.0% | 0.0% | 0.3% |
| Office/outpatient visit new (99203) | \$77,301,278 | 8.5% | 4.6% - 12.4% | 0.0% | 12.2% | 0.0% | 74.0% | 13.9% | 0.2% |
| Nursing fac care subseq (99309) | \$72,533,876 | 13.1% | 6.3% - 19.9% | 20.1% | 47.8% | 0.0% | 32.1% | 0.0% | 0.2% |
| Office/outpatient visit new (99205) | \$68,903,651 | 16.2% | 12.5% - 19.9% | 0.0% | 0.2% | 0.0% | 99.8% | 0.0% | 0.2% |
| Nursing facility care init (99306) | \$66,156,144 | 36.5% | 31.1% - 42.0% | 8.3% | 16.8% | 0.0% | 74.9% | 0.0% | 0.2% |
| Hospital discharge day (99239) | \$63,157,106 | 15.9% | 10.8% - 20.9% | 13.2% | 41.4% | 0.0% | 45.4% | 0.0% | 0.2% |
| Chron care mgmt srvc 20 min (99490) | \$62,178,566 | 63.5% | 41.3% - 85.6% | 0.7% | 99.0% | 0.0% | 0.0% | 0.2% | 0.2% |
| Subsequent hospital care (99231) | \$53,944,806 | 21.6% | 13.9% - 29.3% | 6.1% | 9.4% | 0.0% | 84.5% | 0.0% | 0.2% |
| Nursing fac care subseq (99308) | \$42,669,124 | 8.4% | 3.1% - 13.8% | 31.7% | 53.0% | 0.0% | 15.3% | 0.0% | 0.1% |
| Nursing fac care subseq (99310) | \$41,148,467 | 30.0% | 23.6% - 36.3% | 9.2% | 18.5% | 0.0% | 69.1% | 3.2% | 0.1% |
| Hospital discharge day (99238) | \$33,637,876 | 20.7% | 12.4% - 29.0% | 0.0% | 95.9% | 0.0% | 4.1% | 0.0% | 0.1% |
| Home visit est patient (99349) | \$18,298,741 | 17.8% | 10.7% - 24.9% | 7.3% | 83.1% | 0.0% | 9.6% | 0.0% | 0.1% |
| Nursing fac care subseq (99307) | \$17,569,886 | 15.3% | 3.8% - 26.8% | 19.7% | 51.7% | 0.0% | 28.7% | 0.0% | 0.1% |

| E & M Codes | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval | Percentage of Service Improper Payments by Type of Error | | | | | Percent of Overall Improper Payments |
|-------------------------------------|-----------------------------|-----------------------|-------------------------|--|------------------|-------------------|------------------|-------------|--------------------------------------|
| | | | | No Doc | Insufficient Doc | Medical Necessity | Incorrect Coding | Other | |
| Critical care addl 30 min (99292) | \$14,408,891 | 35.7% | 16.6% - 54.7% | 0.9% | 97.0% | 0.0% | 1.4% | 0.8% | 0.0% |
| Office/outpatient visit est (99211) | \$12,940,752 | 29.3% | 11.4% - 47.2% | 0.0% | 84.6% | 0.0% | 15.4% | 0.0% | 0.0% |
| Emergency dept visit (99283) | \$9,927,824 | 7.7% | (1.2%) - 16.5% | 0.0% | 18.1% | 0.0% | 81.9% | 0.0% | 0.0% |
| Emergency dept visit (99284) | \$7,173,694 | 1.8% | (1.7%) - 5.3% | 0.0% | 0.0% | 0.0% | 100.0% | 0.0% | 0.0% |
| Observ/hosp same date (99234) | \$725,764 | 65.6% | 54.9% - 76.3% | 9.1% | 81.7% | 0.0% | 7.2% | 2.0% | 0.0% |
| Overall (E&M Codes) | \$3,822,303,996 | 12.3% | 11.4% - 13.1% | 5.6% | 31.2% | 0.6% | 61.1% | 1.5% | 11.9% |

Table K2 provides information on the impact of one-level disagreement between Part B MACs and providers when coding E&M services.

Table K2: Impact of 1-Level E&M (Top 20)

| Final E & M Codes | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|--|-----------------------------|-----------------------|-------------------------|
| Office/outpatient visit est (99214) | \$232,544,473 | 2.9% | 2.0% - 3.7% |
| Subsequent hospital care (99233) | \$217,980,124 | 11.4% | 10.2% - 12.6% |
| Office/outpatient visit est (99213) | \$217,165,075 | 4.1% | 3.0% - 5.3% |
| Emergency dept visit (99285) | \$194,461,041 | 12.4% | 10.5% - 14.3% |
| Initial hospital care (99223) | \$118,609,767 | 7.1% | 6.0% - 8.1% |
| Office/outpatient visit new (99204) | \$105,302,767 | 8.8% | 6.7% - 10.9% |
| Office/outpatient visit est (99215) | \$83,269,505 | 8.1% | 6.2% - 10.1% |
| Office/outpatient visit est (99212) | \$59,439,600 | 15.0% | 8.9% - 21.2% |
| Initial hospital care (99222) | \$58,638,044 | 8.0% | 5.9% - 10.1% |
| Office/outpatient visit new (99203) | \$57,174,419 | 6.3% | 3.6% - 9.0% |
| Subsequent hospital care (99231) | \$38,476,720 | 15.4% | 9.9% - 21.0% |
| Subsequent hospital care (99232) | \$36,379,910 | 1.4% | 0.4% - 2.4% |
| Office/outpatient visit new (99205) | \$35,074,515 | 8.2% | 6.1% - 10.4% |
| Hospital discharge day (99239) | \$27,246,575 | 6.8% | 4.4% - 9.3% |
| Nursing fac care subseq (99309) | \$20,415,742 | 3.7% | 1.9% - 5.5% |
| Nursing fac care subseq (99310) | \$15,555,795 | 11.3% | 7.9% - 14.7% |
| Nursing facility care init (99306) | \$15,267,813 | 8.4% | 5.7% - 11.1% |
| Emergency dept visit (99283) | \$8,132,555 | 6.3% | (2.2%) - 14.7% |
| Nursing fac care subseq (99308) | \$6,536,496 | 1.3% | (0.0%) - 2.6% |
| Initial observation care (99220) | \$5,686,687 | 2.8% | 1.2% - 4.4% |
| All Other Codes | \$57,084,139 | 0.1% | 0.0% - 0.1% |
| Overall (1-Level E&M Codes) | \$1,610,441,761 | 1.6% | 1.5% - 1.8% |

Table K3: Type of Services with Upcoding²⁸ Errors: Part B

| Part B Services (BETOS Codes) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|--|-----------------------------|-----------------------|-------------------------|
| Hospital visit - initial | \$444,063,974 | 15.9% | 14.5% - 17.3% |
| Office visits - established | \$372,004,408 | 2.5% | 2.0% - 3.0% |
| Hospital visit - subsequent | \$320,422,558 | 5.9% | 5.0% - 6.8% |
| Office visits - new | \$291,281,432 | 10.7% | 9.0% - 12.5% |
| Emergency room visit | \$214,400,639 | 10.2% | 8.5% - 11.9% |
| Nursing home visit | \$143,755,439 | 7.4% | 5.5% - 9.2% |
| Hospital visit - critical care | \$107,880,371 | 10.7% | 7.7% - 13.8% |
| Ambulance | \$29,824,274 | 0.7% | 0.3% - 1.1% |
| Dialysis services (Medicare Fee Schedule) | \$17,018,500 | 2.0% | 0.7% - 3.4% |
| Specialist - ophthalmology | \$9,416,478 | 0.5% | (0.0%) - 1.0% |
| Chiropractic | \$7,391,042 | 1.2% | 0.4% - 1.9% |
| Minor procedures - other (Medicare fee schedule) | \$6,232,814 | 0.2% | (0.0%) - 0.3% |
| Specialist - other | \$5,835,874 | 0.5% | (0.5%) - 1.5% |
| Other drugs | \$4,841,482 | 0.0% | (0.0%) - 0.1% |
| Other tests - EKG monitoring | \$3,544,272 | 0.9% | (1.0%) - 2.8% |
| Lab tests - blood counts | \$3,210,953 | 1.2% | 0.7% - 1.6% |
| Specialist - psychiatry | \$2,420,639 | 0.2% | (0.1%) - 0.5% |
| Ambulatory procedures - skin | \$1,691,789 | 0.1% | (0.0%) - 0.2% |
| Home visit | \$1,327,282 | 0.6% | (0.1%) - 1.3% |
| Standard imaging - musculoskeletal | \$1,172,758 | 0.2% | (0.2%) - 0.7% |
| All Other Codes | \$2,399,792 | 0.0% | 0.0% - 0.0% |
| Overall (Part B) | \$1,990,136,769 | 2.0% | 1.8% - 2.2% |

Table K4: Type of Services with Upcoding Errors: DMEPOS

| DMEPOS (HCPCS) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|---------------------------------|-----------------------------|-----------------------|-------------------------|
| Glucose Monitor | \$7,418,699 | 4.3% | 2.2% - 6.4% |
| Immunosuppressive Drugs | \$761,543 | 0.3% | (0.1%) - 0.6% |
| Wheelchairs Options/Accessories | \$554,410 | 0.4% | (0.2%) - 1.1% |
| Repairs/DMEPOS | \$497,686 | 6.5% | (5.4%) - 18.5% |
| Infusion Pumps & Related Drugs | \$343,775 | 0.1% | (0.0%) - 0.1% |
| Parenteral Nutrition | \$198,110 | 0.1% | (0.0%) - 0.2% |
| CPAP | \$165,573 | 0.0% | (0.0%) - 0.1% |
| Urological Supplies | \$142,914 | 0.1% | (0.0%) - 0.1% |

²⁸ Upcoding refers to billing a higher level service or a service with a higher payment than is supported by the medical record documentation

| DMEPOS (HCPCS) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|----------------------------|-----------------------------|-----------------------|-------------------------|
| Ostomy Supplies | \$125,920 | 0.1% | (0.0%) - 0.1% |
| Lower Limb Prostheses | \$94,662 | 0.0% | (0.0%) - 0.1% |
| Enteral Nutrition | \$92,337 | 0.1% | (0.0%) - 0.1% |
| Suction Pump | \$36,410 | 0.2% | (0.2%) - 0.6% |
| Surgical Dressings | \$26,506 | 0.0% | (0.0%) - 0.0% |
| Nebulizers & Related Drugs | \$7,148 | 0.0% | (0.0%) - 0.0% |
| Ventilators | \$18 | 0.0% | (0.0%) - 0.0% |
| Overall (DMEPOS) | \$10,465,710 | 0.1% | 0.1% - 0.2% |

Table K5: Type of Services with Upcoding Errors: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|---|-----------------------------|-----------------------|-------------------------|
| Nonhospital based hospice | \$174,313,791 | 1.1% | 0.4% - 1.7% |
| SNF Inpatient | \$87,729,212 | 0.3% | 0.1% - 0.4% |
| Hospital based hospice | \$38,827,584 | 2.7% | 0.4% - 5.0% |
| Hospital Outpatient | \$36,014,914 | 0.1% | 0.0% - 0.1% |
| Home Health | \$12,725,785 | 0.1% | (0.0%) - 0.2% |
| SNF Inpatient Part B | \$12,484,351 | 0.4% | (0.4%) - 1.2% |
| Critical Access Hospital | \$8,878,627 | 0.1% | (0.0%) - 0.3% |
| Clinic OPT | \$333,419 | 0.1% | (0.1%) - 0.2% |
| Hospital Other Part B | \$265,151 | 0.0% | (0.0%) - 0.1% |
| Clinic CORF | \$55,264 | 0.2% | (0.1%) - 0.5% |
| Overall (Part A Excluding Hospital IPPS) | \$371,628,098 | 0.2% | 0.1% - 0.3% |

Table K6: Type of Services with Upcoding Errors: Part A Hospital IPPS

| Part A Hospital IPPS Services (MS-DRGs) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|---|-----------------------------|-----------------------|-------------------------|
| Infectious & Parasitic Diseases W O.R. Procedure (853, 854, 855) | \$44,884,459 | 1.3% | (0.8%) - 3.3% |
| Extensive O.R. Procedure Unrelated To Principal Diagnosis (981, 982, 983) | \$28,501,091 | 2.8% | (0.5%) - 6.1% |
| Septicemia Or Severe Sepsis WO MV >96 Hours (871, 872) | \$18,596,079 | 0.2% | (0.1%) - 0.6% |
| Spinal Fus Exc Cerv W Spinal Curv/Malig/Infec Or Ext Fus (456, 457, 458) | \$15,968,480 | 2.4% | (2.2%) - 7.0% |
| Renal Failure (682, 683, 684) | \$13,724,230 | 0.6% | 0.1% - 1.1% |
| Simple Pneumonia & Pleurisy (193, 194, 195) | \$13,641,419 | 0.7% | 0.1% - 1.3% |
| Major Chest Procedures (163, 164, 165) | \$13,334,673 | 1.4% | (1.0%) - 3.9% |
| Major Small & Large Bowel Procedures (329, 330, 331) | \$11,717,792 | 0.5% | (0.1%) - 1.1% |

| Part A Hospital IPPS Services (MS-DRGs) | Projected Improper Payments | Improper Payment Rate | 95% Confidence Interval |
|---|-----------------------------|-----------------------|-------------------------|
| Chronic Obstructive Pulmonary Disease (190, 191, 192) | \$11,476,733 | 0.6% | (0.5%) - 1.6% |
| Other Resp System O.R. Procedures (166, 167, 168) | \$10,671,033 | 1.6% | (1.6%) - 4.8% |
| Cervical Spinal Fusion (471, 472, 473) | \$10,003,709 | 1.5% | (1.4%) - 4.5% |
| Respiratory Infections & Inflammations (177, 178, 179) | \$8,678,724 | 0.7% | (0.3%) - 1.8% |
| Other Digestive System O.R. Procedures (356, 357, 358) | \$8,261,389 | 1.7% | (1.6%) - 5.0% |
| Diabetes (637, 638, 639) | \$7,415,228 | 1.1% | (0.2%) - 2.4% |
| Stomach, Esophageal & Duodenal Proc (326, 327, 328) | \$6,610,616 | 0.7% | (0.7%) - 2.2% |
| Cardiac Arrhythmia & Conduction Disorders (308, 309, 310) | \$6,582,992 | 0.5% | (0.1%) - 1.1% |
| Nonspecific Cerebrovascular Disorders (070, 071, 072) | \$6,399,705 | 1.8% | (0.1%) - 3.7% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | \$5,850,920 | 0.5% | (0.1%) - 1.1% |
| Perc Cardiovasc Proc WO Coronary Artery Stent (250, 251) | \$5,712,657 | 4.5% | (2.9%) - 11.8% |
| Kidney & Urinary Tract Infections (689, 690) | \$5,502,350 | 0.4% | (0.3%) - 1.2% |
| All Other Codes | \$131,894,481 | 0.2% | 0.1% - 0.2% |
| Overall (Part A Hospital IPPS) | \$385,428,759 | 0.3% | 0.2% - 0.4% |

Appendix L: Overpayments

Tables L1 through L4 provide for each claim type the service-specific overpayment rates. The tables are sorted in descending order by projected improper payments.

Table L1: Top 20 Service-Specific Overpayment Rates: Part B

| Part B Services (HCPCS Codes) | Claims Reviewed | Lines Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|-------------------------------------|-----------------|----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| All Codes With Less Than 30 Claims | 4,634 | 8,307 | \$110,885 | \$1,016,059 | \$3,603,631,278 | 8.7% | 5.9% - 11.7% |
| Initial hospital care (99223) | 686 | 687 | \$35,232 | \$127,886 | \$456,023,354 | 27.2% | 24.8% - 29.6% |
| Subsequent hospital care (99233) | 672 | 988 | \$19,154 | \$97,952 | \$364,115,497 | 19.0% | 16.8% - 21.4% |
| Office/outpatient visit est (99214) | 512 | 514 | \$2,365 | \$50,209 | \$356,102,902 | 4.4% | 3.4% - 6.3% |
| Therapeutic exercises (97110) | 371 | 395 | \$3,960 | \$18,459 | \$244,967,061 | 21.0% | 16.5% - 26.3% |
| Emergency dept visit (99285) | 299 | 299 | \$6,585 | \$47,548 | \$219,283,364 | 14.0% | 12.0% - 16.3% |
| Chiropract manj 3-4 regions (98941) | 245 | 331 | \$5,129 | \$11,193 | \$202,601,504 | 46.0% | 37.9% - 54.1% |
| Subsequent hospital care (99232) | 568 | 998 | \$5,687 | \$65,984 | \$201,046,796 | 7.9% | 5.2% - 10.6% |
| BLS (A0428) | 273 | 285 | \$11,545 | \$53,601 | \$193,759,971 | 21.5% | 16.0% - 26.9% |
| Critical care first hour (99291) | 302 | 361 | \$12,929 | \$72,776 | \$183,468,482 | 19.0% | 14.5% - 23.6% |
| Office/outpatient visit new (99204) | 225 | 225 | \$4,740 | \$31,924 | \$179,902,093 | 15.0% | 11.9% - 18.2% |
| Drug test def 22+ classes (G0483) | 382 | 382 | \$57,304 | \$72,185 | \$169,605,093 | 71.7% | 58.7% - 84.7% |
| Office/outpatient visit est (99213) | 550 | 551 | \$1,170 | \$36,116 | \$152,535,443 | 2.9% | 5.0% - 8.5% |
| BLS-emergency (A0429) | 180 | 180 | \$6,513 | \$53,618 | \$150,581,127 | 18.7% | 9.6% - 27.9% |
| Office/outpatient visit est (99215) | 174 | 181 | \$2,863 | \$21,769 | \$133,110,410 | 13.0% | 10.2% - 15.9% |
| Psytx pt&/family 60 minutes (90837) | 107 | 158 | \$4,090 | \$15,911 | \$129,846,288 | 26.1% | 13.3% - 38.9% |
| ALS1-emergency (A0427) | 177 | 177 | \$6,237 | \$70,745 | \$129,594,401 | 7.7% | 3.9% - 11.5% |
| Initial hospital care (99222) | 226 | 226 | \$4,694 | \$27,783 | \$126,444,550 | 17.3% | 14.5% - 22.9% |
| Ground mileage (A0425) | 543 | 556 | \$6,141 | \$40,994 | \$120,282,061 | 13.0% | 7.5% - 18.9% |
| Cataract surg w/iol 1 stage (66984) | 181 | 182 | \$7,023 | \$108,481 | \$111,524,365 | 6.6% | 1.0% - 12.2% |
| All Other Codes | 11,211 | 23,369 | \$564,546 | \$3,219,863 | \$2,557,300,058 | 11.0% | 10.3% - 13.2% |
| Total (Part B) | 17,037 | 39,352 | \$878,792 | \$5,261,057 | \$9,985,726,098 | 10.2% | 9.3% - 12.0% |

Table L2: Top 20 Service-Specific Overpayment Rates: DMEPOS

| DMEPOS (HCPCS) | Claims Reviewed | Lines Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|--------------------------------------|-----------------|----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| All Codes With Less Than 30 Claims | 2,322 | 3,613 | \$300,080 | \$1,140,279 | \$679,700,229 | 38.7% | 33.1% - 44.3% |
| Oxygen concentrator (E1390) | 799 | 817 | \$20,946 | \$54,223 | \$209,267,243 | 38.7% | 34.9% - 42.9% |
| Home vent non-invasive inter (E0466) | 335 | 340 | \$87,364 | \$312,188 | \$72,169,331 | 27.9% | 22.8% - 33.0% |
| Blood glucose/reagent strips (A4253) | 229 | 240 | \$2,086 | \$4,743 | \$71,457,468 | 45.3% | 37.6% - 53.0% |
| LSO sc r ant/pos pnl pre ots (L0650) | 108 | 108 | \$40,108 | \$101,118 | \$66,662,803 | 36.4% | 26.1% - 46.7% |
| Ko adj jnt pos r sup pre ots (L1833) | 137 | 152 | \$60,260 | \$80,689 | \$62,499,498 | 74.8% | 66.1% - 83.5% |
| Cont airway pressure device (E0601) | 227 | 240 | \$3,202 | \$7,360 | \$46,290,389 | 41.6% | 34.6% - 48.7% |
| Diab shoe for density insert (A5500) | 104 | 119 | \$9,021 | \$12,823 | \$40,989,454 | 71.1% | 61.8% - 80.4% |
| Multi den insert custom mold (A5513) | 95 | 107 | \$13,602 | \$17,577 | \$37,339,160 | 73.2% | 60.0% - 86.4% |
| CPAP full face mask (A7030) | 154 | 156 | \$4,855 | \$13,047 | \$36,905,749 | 37.3% | 29.0% - 45.6% |
| Portable gaseous O2 (E0431) | 399 | 407 | \$3,744 | \$5,852 | \$36,741,721 | 64.1% | 58.7% - 69.5% |
| Nasal application device (A7034) | 138 | 138 | \$3,354 | \$7,002 | \$36,733,993 | 47.2% | 38.2% - 56.2% |
| Ext amb infusn pump insulin (E0784) | 49 | 49 | \$11,486 | \$16,293 | \$31,676,102 | 71.0% | 57.7% - 84.3% |
| Collagen dressing <=16 sq in (A6021) | 66 | 71 | \$25,420 | \$34,385 | \$30,858,319 | 72.8% | 57.6% - 88.0% |
| Arformoterol non-comp unit (J7605) | 100 | 101 | \$7,816 | \$48,242 | \$28,107,702 | 16.4% | 8.8% - 24.0% |
| Mycophenolic acid (J7518) | 107 | 107 | \$13,501 | \$45,198 | \$27,388,509 | 29.7% | 19.5% - 39.9% |
| Replacement facemask interfa (A7031) | 196 | 200 | \$4,634 | \$12,046 | \$26,326,017 | 37.9% | 29.7% - 46.2% |
| Replacement nasal cushion (A7032) | 146 | 147 | \$4,192 | \$9,943 | \$26,049,217 | 46.8% | 35.0% - 58.7% |
| LSO sag r an/pos pnl pre ots (L0648) | 54 | 54 | \$25,237 | \$43,709 | \$25,627,414 | 57.4% | 42.5% - 72.2% |
| Rad w/o backup non-inv intfc (E0470) | 109 | 114 | \$5,070 | \$9,796 | \$25,366,635 | 52.6% | 42.4% - 62.8% |
| All Other Codes | 7,677 | 13,328 | \$1,257,707 | \$9,997,751 | \$964,264,049 | 29.4% | 27.9% - 31.3% |
| Total (DMEPOS) | 10,981 | 20,608 | \$1,903,686 | \$11,974,265 | \$2,582,421,004 | 35.5% | 33.7% - 37.3% |

Table L3: Service-Specific Overpayment Rates: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Claims Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|---|-----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| Home Health | 1,175 | \$542,265 | \$3,073,893 | \$3,137,906,397 | 17.5% | 15.3% - 20.0% |
| Hospital Inpatient (Part A) | 933 | \$3,857,357 | \$14,155,348 | \$3,028,843,725 | 27.5% | 23.4% - 31.5% |
| SNF Inpatient | 1,611 | \$674,745 | \$9,570,898 | \$2,148,184,957 | 7.0% | 5.4% - 8.6% |
| Hospital Outpatient | 2,236 | \$39,861 | \$1,297,921 | \$2,026,369,179 | 3.1% | 2.3% - 4.0% |

| Part A Excluding Hospital IPPS Services (TOB) | Claims Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|---|-----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| Nonhospital based hospice | 766 | \$309,129 | \$2,773,737 | \$1,779,901,883 | 11.0% | 8.6% - 13.3% |
| Clinic ESRD | 612 | \$60,906 | \$1,713,750 | \$394,644,185 | 3.5% | 2.1% - 5.0% |
| Critical Access Hospital | 275 | \$8,723 | \$141,631 | \$386,619,186 | 6.1% | 2.8% - 9.5% |
| Hospital based hospice | 154 | \$95,699 | \$489,465 | \$275,887,344 | 19.3% | 12.6% - 25.9% |
| Hospital Other Part B | 111 | \$899 | \$5,638 | \$133,323,795 | 16.2% | 6.2% - 26.2% |
| SNF Inpatient Part B | 94 | \$2,205 | \$95,600 | \$69,041,788 | 2.3% | 0.5% - 4.1% |
| Community Mental Health Centers | 1 | \$856 | \$856 | \$51,021,678 | 100.0% | 100.0% -100.0% |
| Clinic OPT | 48 | \$1,037 | \$15,104 | \$50,728,222 | 8.6% | (0.2%) - 17.3% |
| RHC | 211 | \$877 | \$28,201 | \$38,030,705 | 3.0% | 0.7% - 5.3% |
| FQHC | 75 | \$171 | \$11,256 | \$17,783,129 | 1.6% | (1.5%) - 4.7% |
| Clinic CORF | 73 | \$4,447 | \$16,480 | \$6,229,586 | 25.5% | 9.5% - 41.4% |
| SNF Outpatient | 52 | \$336 | \$22,327 | \$3,175,420 | 1.4% | (0.6%) - 3.4% |
| Hospital Inpatient Part B | 48 | \$101 | \$58,152 | \$1,585,559 | 0.2% | 0.0% - 0.8% |
| All Other Codes | 5 | \$0 | \$162 | \$0 | 0.0% | 0.0% - 0.0% |
| Total (Part A Excluding Hospital IPPS) | 8,480 | \$5,599,613 | \$33,470,420 | \$13,549,276,737 | 8.0% | 7.3% - 8.8% |

Table L4: Top 20 Service-Specific Overpayment Rates: Part A Hospital IPPS

| Part A Inpatient Hospital PPS Services (MS-DRGs) | Claims Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|---|-----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| All Codes With Less Than 30 Claims | 2,992 | \$1,828,341 | \$43,597,869 | \$1,420,892,056 | 4.1% | 3.8% - 5.3% |
| Psychoses (885) | 703 | \$811,327 | \$6,235,648 | \$455,396,293 | 13.0% | 9.9% - 16.5% |
| Major Joint Replacement Or Reattachment Of Lower Extremity WO MCC (470) | 398 | \$285,123 | \$5,236,182 | \$333,443,955 | 5.4% | 3.4% - 7.8% |
| Endovascular Cardiac Valve Replacement WO MCC (267) | 52 | \$368,875 | \$2,278,125 | \$147,180,341 | 17.7% | 7.1% - 29.8% |
| Degenerative Nervous System Disorders WO MCC (057) | 203 | \$450,876 | \$2,223,152 | \$123,094,179 | 19.7% | 13.4% - 26.6% |
| Endovascular Cardiac Valve Replacement W MCC (266) | 194 | \$1,464,443 | \$10,549,127 | \$108,537,512 | 13.5% | 9.1% - 18.5% |
| Spinal Fusion Except Cervical WO MCC (460) | 313 | \$376,787 | \$8,350,902 | \$86,222,986 | 4.5% | 2.5% - 7.1% |
| Organic Disturbances & Mental Retardation (884) | 162 | \$304,118 | \$1,707,070 | \$85,299,777 | 16.8% | 9.9% - 23.9% |
| Syncope & Collapse (312) | 183 | \$174,394 | \$987,743 | \$74,805,478 | 17.8% | 12.1% - 23.5% |
| Signs & Symptoms WO MCC (948) | 51 | \$102,111 | \$251,442 | \$72,350,492 | 39.6% | 26.4% - 55.6% |
| Chest Pain (313) | 129 | \$149,406 | \$537,113 | \$71,217,584 | 28.0% | 19.5% - 37.1% |
| Extensive O.R. Procedure Unrelated To Principal Diagnosis W MCC (981) | 38 | \$80,252 | \$1,034,436 | \$63,774,232 | 8.0% | 0.3% - 15.7% |
| Simple Pneumonia & Pleurisy W MCC (193) | 48 | \$15,807 | \$425,573 | \$63,042,206 | 5.6% | (2.7%) - 14.9% |
| Respiratory Infections & Inflammations W MCC (177) | 76 | \$74,448 | \$1,110,989 | \$59,158,204 | 6.7% | (1.2%) - 14.7% |
| Septicemia Or Severe Sepsis WO MV >96 Hours W MCC (871) | 136 | \$16,970 | \$1,731,604 | \$53,417,550 | 0.8% | (0.4%) - 3.9% |
| Misc Disorders Of Nutrition,metabolism,fluids/Electrolytes W MCC (640) | 47 | \$35,017 | \$467,966 | \$51,801,398 | 7.1% | 1.1% - 14.4% |
| Pulmonary Edema & Respiratory Failure (189) | 395 | \$145,008 | \$3,872,972 | \$51,341,634 | 3.1% | 1.2% - 5.2% |
| Seizures WO MCC (101) | 46 | \$50,295 | \$246,058 | \$49,795,686 | 19.6% | 7.6% - 32.5% |
| Renal Failure W CC (683) | 164 | \$55,154 | \$1,040,688 | \$45,963,439 | 5.6% | 1.9% - 10.4% |
| Major Joint/Limb Reattachment Procedure Of Upper Extremities (483) | 62 | \$59,582 | \$979,862 | \$45,318,638 | 5.8% | 0.1% - 11.6% |
| All Other Codes | 7,107 | \$5,071,638 | \$103,073,055 | \$1,581,861,990 | 3.0% | 3.0% - 3.9% |
| Total (Part A Hospital IPPS) | 13,499 | \$11,919,971 | \$195,937,575 | \$5,043,915,629 | 4.4% | 4.4% - 5.2% |

Table L5: Overpayment Rate: All Claim Types

| All Services | Claims Reviewed | Sample Dollars Overpaid | Total Sample Dollars Paid | Projected Dollars Overpaid | Overpayment Rate | 95% Confidence Interval |
|--------------|-----------------|-------------------------|---------------------------|----------------------------|------------------|-------------------------|
| All | 49,997 | \$20,302,062 | \$246,643,316 | \$31,161,339,468 | 8.0% | 7.8% - 8.7% |

Appendix M: Underpayments

The following tables provide for each claim type the service-specific underpayment rates. The tables are sorted in descending order by projected dollars underpaid. All estimates in these tables are based on a minimum of 30 claims in the sample with at least one claim underpaid.

Table M1: Service-Specific Underpayment Rates: Part B

| Part B Services (BETOS Codes) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|--------------------------------------|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| Office/outpatient visit est (99213) | 550 | 551 | \$1,352 | \$36,116 | \$202,061,624 | 3.8% | 5.0% - 8.5% |
| Office/outpatient visit est (99212) | 134 | 134 | \$1,117 | \$4,701 | \$87,837,376 | 22.2% | 20.6% - 40.5% |
| Subsequent hospital care (99231) | 140 | 226 | \$1,334 | \$7,694 | \$45,562,985 | 18.3% | 13.9% - 29.3% |
| All Codes With Less Than 30 Claims | 4,634 | 8,307 | \$637 | \$1,016,059 | \$41,543,029 | 0.1% | 5.9% - 11.7% |
| Office/outpatient visit est (99214) | 512 | 514 | \$214 | \$50,209 | \$33,368,468 | 0.4% | 3.4% - 6.3% |
| Initial hospital care (99222) | 226 | 226 | \$411 | \$27,783 | \$10,057,971 | 1.4% | 14.5% - 22.9% |
| Emergency dept visit (99283) | 35 | 35 | \$116 | \$1,696 | \$8,132,555 | 6.3% | (1.2%) - 16.5% |
| Nursing fac care subseq (99308) | 105 | 118 | \$86 | \$6,543 | \$6,536,496 | 1.3% | 3.1% - 13.8% |
| Ranibizumab injection (J2778) | 102 | 106 | \$1,521 | \$193,918 | \$5,853,974 | 0.8% | (0.7%) - 4.4% |
| Unlisted molecular pathology (81479) | 295 | 484 | \$2,184 | \$206,887 | \$5,519,149 | 5.5% | 17.9% - 52.5% |
| Nursing fac care subseq (99307) | 32 | 36 | \$79 | \$1,305 | \$5,036,623 | 4.4% | 3.8% - 26.8% |
| Office/outpatient visit new (99203) | 132 | 132 | \$217 | \$11,869 | \$4,855,265 | 0.5% | 4.6% - 12.4% |
| Therapeutic exercises (97110) | 371 | 395 | \$64 | \$18,459 | \$4,606,837 | 0.4% | 16.5% - 26.3% |
| Rituximab injection (J9310) | 101 | 108 | \$3,957 | \$617,085 | \$3,293,008 | 0.2% | (0.5%) - 3.0% |
| Chiropract manj 1-2 regions (98940) | 126 | 154 | \$78 | \$3,774 | \$2,986,710 | 2.0% | 19.8% - 37.2% |
| Manual therapy 1/> regions (97140) | 306 | 322 | \$43 | \$8,895 | \$2,930,114 | 0.7% | 13.1% - 23.6% |
| Ground mileage (A0425) | 543 | 556 | \$122 | \$40,994 | \$2,308,640 | 0.2% | 7.5% - 18.9% |
| Emergency dept visit (99285) | 299 | 299 | \$60 | \$47,548 | \$2,152,310 | 0.1% | 12.0% - 16.3% |
| Office/outpatient visit est (99211) | 46 | 46 | \$105 | \$694 | \$1,991,309 | 4.5% | 11.4% - 47.2% |
| Subsequent hospital care (99232) | 568 | 998 | \$74 | \$65,984 | \$1,640,185 | 0.1% | 5.2% - 10.6% |
| All Other Codes | 13,102 | 25,605 | \$2,344 | \$2,892,841 | \$8,332,276 | 0.0% | 14.2% - 16.0% |
| Total (Part B) | 17,037 | 39,352 | \$16,114 | \$5,261,057 | \$486,606,906 | 0.5% | 9.3% - 12.0% |

Table M2: Service-Specific Underpayment Rates: DMEPOS

| DMEPOS (HCP Codes) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|--------------------------------------|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| Coude tip urinary catheter (A4352) | 101 | 101 | \$3,195 | \$90,380 | \$4,183,512 | 3.9% | 11.1% - 35.3% |
| Oxygen concentrator (E1390) | 799 | 817 | \$124 | \$54,223 | \$1,165,695 | 0.2% | 34.9% - 42.9% |
| Tacrolimus imme rel oral 1mg (J7507) | 141 | 156 | \$225 | \$11,263 | \$441,486 | 0.8% | 20.6% - 45.1% |

| DMEPOS (HCPs) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|-------------------------------------|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| Nondisposable nebulizer set (A7005) | 74 | 74 | \$9 | \$782 | \$41,041 | 1.1% | 10.9% - 68.1% |
| All Other Codes | 10,469 | 19,460 | \$0 | \$11,817,616 | \$0 | 0.0% | 33.5% - 37.4% |
| Total (DMEPOS) | 10,981 | 20,608 | \$3,553 | \$11,974,265 | \$5,831,735 | 0.1% | 33.7% - 37.3% |

Table M3: Service-Specific Underpayment Rates: Part A Excluding Hospital IPPS

| Part A Excluding Hospital IPPS Services (TOB) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|---|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| Hospital Outpatient | 2,236 | 2,236 | \$568 | \$1,297,921 | \$28,597,713 | 0.0% | 2.3% - 4.0% |
| Home Health | 1,175 | 1,175 | \$4,036 | \$3,073,893 | \$21,855,921 | 0.1% | 15.3% - 20.0% |
| Hospital Inpatient Part B | 48 | 48 | \$140 | \$58,152 | \$2,372,803 | 0.2% | 0.0% - 0.8% |
| Nonhospital based hospice | 766 | 766 | \$30 | \$2,773,737 | \$197,322 | 0.0% | 8.6% - 13.3% |
| All Other Codes | 4,255 | 4,255 | \$0 | \$26,266,716 | \$0 | 0.0% | 8.7% - 10.8% |
| Total (Part A Excluding Hospital IPPS) | 8,480 | 8,480 | \$4,774 | \$33,470,420 | \$53,023,759 | 0.0% | 7.3% - 8.8% |

Table M4: Service-Specific Underpayment Rates: Part A Hospital IPPS

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|---|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| All Codes With Less Than 30 Claims | 2,992 | 2,992 | \$202,493 | \$43,597,869 | \$158,602,056 | 0.5% | 3.8% - 5.3% |
| Septicemia Or Severe Sepsis WO MV >96 Hours W MCC (871) | 136 | 136 | \$22,991 | \$1,731,604 | \$63,961,064 | 1.0% | (0.4%) - 3.9% |
| Heart Failure & Shock W CC (292) | 102 | 102 | \$10,523 | \$630,905 | \$15,042,782 | 2.1% | 0.9% - 6.5% |
| Major Joint Replacement Or Reattachment Of Lower Extremity WO MCC (470) | 398 | 398 | \$12,152 | \$5,236,182 | \$14,892,702 | 0.2% | 3.4% - 7.8% |
| Septicemia Or Severe Sepsis WO MV >96 Hours WO MCC (872) | 52 | 52 | \$4,482 | \$348,548 | \$12,538,704 | 1.2% | (1.0%) - 6.8% |
| Esophagitis, Gastroent & Misc Digest Disorders WO MCC (392) | 263 | 263 | \$17,440 | \$1,375,024 | \$11,053,343 | 1.3% | 3.1% - 9.1% |
| Respiratory Infections & Inflammations W CC (178) | 36 | 36 | \$13,761 | \$299,173 | \$9,900,497 | 4.1% | 0.4% - 13.8% |
| Kidney & Urinary Tract Infections WO MCC (690) | 50 | 50 | \$3,777 | \$272,428 | \$9,871,556 | 1.2% | (0.3%) - 7.7% |
| Simple Pneumonia & Pleurisy W CC (194) | 108 | 108 | \$11,445 | \$679,884 | \$9,399,402 | 1.7% | 0.5% - 5.6% |
| Other Circulatory System Diagnoses W MCC (314) | 51 | 51 | \$7,454 | \$717,830 | \$9,270,401 | 1.3% | (1.0%) - 14.8% |
| Simple Pneumonia & Pleurisy WO CC/MCC (195) | 52 | 52 | \$7,938 | \$303,256 | \$7,789,447 | 3.3% | 0.1% - 15.3% |
| Atherosclerosis WO MCC (303) | 31 | 31 | \$11,417 | \$157,649 | \$7,750,780 | 6.2% | 7.1% - 41.4% |
| Infectious & Parasitic Diseases W O.R. Procedure W MCC (853) | 51 | 51 | \$5,116 | \$1,829,152 | \$7,396,629 | 0.2% | (0.9%) - 3.5% |
| Major Small & Large Bowel Procedures WO CC/MCC (331) | 52 | 52 | \$13,288 | \$583,601 | \$7,320,534 | 2.0% | 1.0% - 10.9% |
| Circulatory Disorders Except AMI, W Card Cath WO MCC (287) | 115 | 115 | \$12,661 | \$808,856 | \$7,110,402 | 1.5% | 3.5% - 15.0% |
| Endovascular Cardiac Valve Replacement WO MCC (267) | 52 | 52 | \$20,065 | \$2,278,125 | \$6,732,432 | 0.8% | 7.1% - 29.8% |

| Part A Hospital IPPS Services (MS-DRGs) | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|---|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| Psychoses (885) | 703 | 703 | \$11,569 | \$6,235,648 | \$6,350,483 | 0.2% | 9.9% - 16.5% |
| Coronary Bypass W Cardiac Cath WO MCC (234) | 48 | 48 | \$14,251 | \$1,514,435 | \$6,266,489 | 1.3% | (1.2%) - 3.9% |
| Major Gastrointestinal Disorders & Peritoneal Infections W CC (372) | 42 | 42 | \$8,669 | \$330,208 | \$6,162,450 | 2.4% | (0.4%) - 5.1% |
| Simple Pneumonia & Pleurisy W MCC (193) | 48 | 48 | \$2,769 | \$425,573 | \$6,098,578 | 0.5% | (2.7%) - 14.9% |
| All Other Codes | 8,117 | 8,117 | \$489,935 | \$126,581,624 | \$120,935,693 | 0.2% | 4.1% - 5.1% |
| Total (Part A Hospital IPPS) | 13,499 | 13,499 | \$904,195 | \$195,937,575 | \$504,446,425 | 0.4% | 4.4% - 5.2% |

Table M5: Underpayment Rate: All Claim Types

| All Services | Claims Reviewed | Lines Reviewed | Sample Dollars Underpaid | Total Sample Dollars Paid | Projected Dollars Underpaid | Underpayment Rate | 95% Confidence Interval |
|--------------|-----------------|----------------|--------------------------|---------------------------|-----------------------------|-------------------|-------------------------|
| All | 49,997 | 81,939 | \$928,636 | \$246,643,316 | \$1,049,908,823 | 0.3% | 7.8% - 8.7% |

Appendix N: Statistics and Other Information for the CERT Sample

Summary of Sampling and Estimation Methodology for the CERT Program

The improper payment rate calculation complies with the requirements of Office of Management and Budget (OMB) Circular A-123, Appendix C.

The sampling process for CERT follows a service level stratification plan. This system allots approximately 100 service level strata per claim type, except for Part A Excluding Hospital IPPS, for which service level stratification is not possible. For this case, strata were designated by a two-digit type of bill, which results in fewer than 20 strata. This stratification system, by design, leads to greater sample sizes for the larger Medicare Administrative Contractors (MACs). Thus, the precision is greater for larger MAC jurisdictions. However, MAC jurisdictions are sufficiently large, therefore all jurisdictions should observe ample number of claims to obtain internal precision goals of plus or minus three percentage points with 95% confidence.

Improper Payment Rate Formula

Sampled claims are subject to reviews, and an improper payment rate is calculated based on those reviews. The improper payment rate is an estimate of the proportion of improper payments made in the Medicare program to the total payments made.

After the claims have been reviewed for improper payments, the sample is projected to the universe statistically using a combination of sampling weights and universe expenditure amounts. CERT utilizes a generalized estimator to handle national, contractor cluster, and service level estimation. National level estimation reduces to a better known estimator known as the separate ratio estimator. Using the separate ratio estimator, improper payment rates for contractor clusters are combined using their relative share of universe expenditures as weights.

Generalized (“Hybrid”) Ratio Estimator

For CERT estimation, the Medicare universe can be partitioned by different groups. The groups relevant for developing the CERT estimator are defined as follows:

partition = group by which payment information is available (denoted by subscript ‘i’)

strata = sampling group (denoted by subscript ‘k’)

domain = area of interest within the universe (denoted by superscript ‘d’)

A partition is defined by the contractor cluster level payment amounts.²⁹ Strata are defined by service categorization and sampling quarter. Domains are areas that CERT focuses analysis on (e.g., motorized wheelchairs). Note for national level estimation, the domain, d, is the entire universe.

²⁹ An A/B MAC consists of two contractor clusters. Each cluster represents their respective Part A and Part B claims. Expenditures (payments) are reported to CERT by contractor cluster. DMEPOS MACs are composed of a single cluster.

The estimator for a domain, d, is expressed as

$$\hat{R}_{HybridEstimator}^d = \frac{\hat{t}_e^{*d}}{\hat{t}_p^{*d}} = \frac{\sum_i \hat{t}_e^{*di}}{\sum_i \hat{t}_p^{*di}} = \frac{\sum_i \frac{\hat{t}_e^{di}}{\hat{t}_p^i} t_p^{*i}}{\sum_i \frac{\hat{t}_p^{di}}{\hat{t}_p^i} t_p^{*i}}$$

where,

\hat{t}_e^{*d} = projected improper payment for the domain, d.

\hat{t}_p^{*d} = projected payment for the domain, d.

t_p^{*i} = known payment for partition 'i'

\hat{t}_p^i = projected payment for partition 'i'.

\hat{t}_e^{di} = projected error for domain 'd' in partition 'i'.

\hat{t}_p^{di} = projected payment for domain 'd' in partition 'i'.

Now, the projected error and payment for domain 'd' within partition 'i' can be computed using the following formulas:

$$\hat{t}_e^{di} = \sum_{k=1}^a \frac{N_k}{n_k} \sum_{j=1}^{n_k^{di}} e_{kj} = \sum_{k=1}^a W_k \sum_{j=1}^{n_k^{di}} e_{kj}$$

$$\hat{t}_p^{di} = \sum_{k=1}^a \frac{N_k}{n_k} \sum_{j=1}^{n_k^{di}} p_{kj} = \sum_{k=1}^a W_k \sum_{j=1}^{n_k^{di}} p_{kj}$$

where

N_k = total number of claims in the universe for strata 'k'

n_k = total number of sampled claims for strata 'k'

The following tables provide information on the sample size for each category for which this report makes national estimates. These tables also show the number of claims containing errors and the percent of claims with payment errors. Data in these tables for Part B and DMEPOS data is expressed in terms of line items, and data in these tables for Part A data is expressed in terms of claims. Totals cannot be calculated for these categories since CMS uses different units for each type of service.

Table N1: Lines in Error: Part B

| Variable | Lines Reviewed | Lines Containing Errors | Percent of Lines Containing Errors |
|--|----------------|-------------------------|------------------------------------|
| HCPCS | | | |
| All Codes With Less Than 30 Claims | 8,307 | 1,317 | 15.9% |
| Comprehen metabolic panel (80053) | 556 | 84 | 15.1% |
| Ground mileage (A0425) | 556 | 91 | 16.4% |
| Initial hospital care (99223) | 687 | 340 | 49.5% |
| Office/outpatient visit est (99213) | 551 | 60 | 10.9% |
| Office/outpatient visit est (99214) | 514 | 54 | 10.5% |
| Routine venipuncture (36415) | 804 | 127 | 15.8% |
| Subsequent hospital care (99232) | 975 | 95 | 9.7% |
| Subsequent hospital care (99233) | 971 | 443 | 45.6% |
| Unlisted molecular pathology (81479) | 484 | 52 | 10.7% |
| Other | 24,880 | 6,562 | 26.4% |
| TOS Code | | | |
| Ambulance | 1,231 | 189 | 15.4% |
| Hospital visit - subsequent | 2,591 | 736 | 28.4% |
| Lab tests - other (non-Medicare fee schedule) | 11,760 | 4,132 | 35.1% |
| Minor procedures - other (Medicare fee schedule) | 2,227 | 349 | 15.7% |
| Office visits - established | 1,485 | 258 | 17.4% |
| Other drugs | 1,285 | 150 | 11.7% |
| Other tests - other | 1,148 | 357 | 31.1% |
| Specialist - other | 1,294 | 61 | 4.7% |
| Specialist - psychiatry | 1,152 | 97 | 8.4% |
| Undefined codes | 1,052 | 23 | 2.2% |
| Other | 14,060 | 2,873 | 20.4% |
| Resolution Type³⁰ | | | |
| Automated | 12,387 | 594 | 4.8% |
| Complex | 71 | 5 | 7.0% |
| None | 26,758 | 8,603 | 32.2% |
| Routine | 69 | 23 | 33.3% |
| Diagnosis Code | | | |
| All Codes With Less Than 30 Claims | 1,949 | 341 | 17.5% |

³⁰ Created using the type of review a line received based upon the resolution code that the contractor used to resolve the line.

| Variable | Lines Reviewed | Lines Containing Errors | Percent of Lines Containing Errors |
|---|----------------|-------------------------|------------------------------------|
| Diabetes mellitus | 1,540 | 304 | 19.7% |
| General symptoms and signs | 1,030 | 259 | 25.1% |
| Hypertensive diseases | 1,507 | 474 | 31.5% |
| Metabolic disorders | 1,491 | 392 | 26.3% |
| Mood affective disorders | 996 | 312 | 31.3% |
| Other dorsopathies | 1,241 | 359 | 28.9% |
| Other forms of heart disease | 1,058 | 254 | 24.0% |
| Persons with potential health hazards related to family and personal history and certain conditions | 3,314 | 1,694 | 51.1% |
| Symptoms and signs involving the circulatory and respiratory systems | 1,039 | 187 | 18.0% |
| Other | 24,120 | 4,649 | 19.3% |

Table N2: Lines in Error: DMEPOS

| Variable | Lines Reviewed | Lines Containing Errors | Percent of Lines Containing Errors |
|--------------------------------------|----------------|-------------------------|------------------------------------|
| Service | | | |
| All Codes With Less Than 30 Claims | 3,613 | 1,242 | 34.4% |
| Disp fee inhal drugs/30 days (Q0513) | 614 | 69 | 11.2% |
| Home vent non-invasive inter (E0466) | 340 | 89 | 26.2% |
| Lancets per box (A4259) | 512 | 258 | 50.4% |
| Maint drug infus cath per wk (A4221) | 308 | 43 | 14.0% |
| Oxygen concentrator (E1390) | 817 | 245 | 30.0% |
| Portable gaseous O2 (E0431) | 407 | 203 | 49.9% |
| Pos airway pressure filter (A7038) | 402 | 159 | 39.6% |
| Px sup fee anti-can sub pres (Q0512) | 392 | 87 | 22.2% |
| Sup fee antiem,antica,immuno (Q0511) | 396 | 104 | 26.3% |
| Other | 12,807 | 4,116 | 32.1% |
| TOS Code | | | |
| CPAP | 2,460 | 883 | 35.9% |
| Glucose Monitor | 883 | 423 | 47.9% |
| Immunosuppressive Drugs | 1,363 | 316 | 23.2% |
| Infusion Pumps & Related Drugs | 1,397 | 249 | 17.8% |
| Lower Limb Orthoses | 678 | 371 | 54.7% |
| Lower Limb Prostheses | 1,325 | 170 | 12.8% |
| Nebulizers & Related Drugs | 2,122 | 371 | 17.5% |
| Ostomy Supplies | 788 | 323 | 41.0% |
| Oxygen Supplies/Equipment | 1,631 | 627 | 38.4% |
| Parenteral Nutrition | 804 | 110 | 13.7% |
| Other | 7,157 | 2,772 | 38.7% |

| Variable | Lines Reviewed | Lines Containing Errors | Percent of Lines Containing Errors |
|---|----------------|-------------------------|------------------------------------|
| Resolution Type³¹ | | | |
| Automated | 3,658 | 19 | 0.5% |
| Complex | 107 | 27 | 25.2% |
| None | 16,766 | 6,542 | 39.0% |
| Routine | 77 | 27 | 35.1% |
| Diagnosis Code | | | |
| All Codes With Less Than 30 Claims | 1,081 | 342 | 31.6% |
| Chronic lower respiratory diseases | 2,606 | 780 | 29.9% |
| Diabetes mellitus | 1,500 | 735 | 49.0% |
| Episodic and paroxysmal disorders | 2,642 | 958 | 36.3% |
| Osteoarthritis | 496 | 286 | 57.7% |
| Other disorders of the skin and subcutaneous tissue | 485 | 274 | 56.5% |
| Other forms of heart disease | 638 | 198 | 31.0% |
| Persons with potential health hazards related to family and personal history and certain conditions | 3,307 | 868 | 26.2% |
| Pulmonary heart disease and diseases of pulmonary circulation | 1,033 | 65 | 6.3% |
| Symptoms and signs involving the genitourinary system | 450 | 116 | 25.8% |
| Other | 6,370 | 1,993 | 31.3% |

Table N3: Claims in Error: Part A Excluding Hospital IPPS

| Variable | Claims Reviewed | Claims Containing Errors | Percent of Claims Containing Errors |
|-----------------------------|-----------------|--------------------------|-------------------------------------|
| Type Of Bill | | | |
| Clinic ESRD | 612 | 30 | 4.9% |
| RHC | 211 | 8 | 3.8% |
| Critical Access Hospital | 275 | 61 | 22.2% |
| Home Health | 1,175 | 312 | 26.6% |
| Hospital Inpatient (Part A) | 933 | 220 | 23.6% |
| Hospital Other Part B | 111 | 28 | 25.2% |
| Hospital Outpatient | 2,236 | 291 | 13.0% |
| Hospital based hospice | 154 | 42 | 27.3% |
| Nonhospital based hospice | 766 | 120 | 15.7% |
| SNF Inpatient | 1,611 | 122 | 7.6% |
| Other | 396 | 43 | 10.9% |
| TOS Code | | | |
| Clinic ESRD | 612 | 30 | 4.9% |
| RHC | 211 | 8 | 3.8% |

³¹ Created using the type of review a line received based upon the resolution code that the contractor used to resolve the line.

| Variable | Claims Reviewed | Claims Containing Errors | Percent of Claims Containing Errors |
|---|-----------------|--------------------------|-------------------------------------|
| Critical Access Hospital | 275 | 61 | 22.2% |
| Home Health | 1,175 | 312 | 26.6% |
| Hospital Inpatient (Part A) | 933 | 220 | 23.6% |
| Hospital Other Part B | 111 | 28 | 25.2% |
| Hospital Outpatient | 2,236 | 291 | 13.0% |
| Hospital based hospice | 154 | 42 | 27.3% |
| Nonhospital based hospice | 766 | 120 | 15.7% |
| SNF Inpatient | 1,611 | 122 | 7.6% |
| Other | 396 | 43 | 10.9% |
| Diagnosis Code | | | |
| Acute kidney failure and chronic kidney disease | 712 | 39 | 5.5% |
| All Codes With Less Than 30 Claims | 529 | 69 | 13.0% |
| Cerebrovascular diseases | 332 | 63 | 19.0% |
| Chronic lower respiratory diseases | 289 | 39 | 13.5% |
| Diabetes mellitus | 251 | 48 | 19.1% |
| Encounters for other specific health care | 519 | 107 | 20.6% |
| Hypertensive diseases | 303 | 63 | 20.8% |
| Other degenerative diseases of the nervous system | 255 | 42 | 16.5% |
| Other forms of heart disease | 516 | 90 | 17.4% |
| Persons encountering health services for examinations | 195 | 22 | 11.3% |
| Other | 4,579 | 695 | 15.2% |

Table N4: Claims in Error: Part A Hospital IPPS

| Variable | Claims Reviewed | Claims Containing Errors | Percent of Claims Containing Errors |
|---|-----------------|--------------------------|-------------------------------------|
| DRG Label | | | |
| All Codes With Less Than 30 Claims | 2,992 | 348 | 11.6% |
| Degenerative Nervous System Disorders WO MCC (057) | 203 | 55 | 27.1% |
| Endovascular Cardiac Valve Replacement W MCC (266) | 194 | 38 | 19.6% |
| Esophagitis, Gastroent & Misc Digest Disorders WO MCC (392) | 263 | 32 | 12.2% |
| Major Joint Replacement Or Reattachment Of Lower Extremity WO MCC (470) | 398 | 40 | 10.1% |
| Psychoses (885) | 703 | 120 | 17.1% |
| Pulmonary Edema & Respiratory Failure (189) | 395 | 43 | 10.9% |
| Renal Failure W CC (683) | 164 | 17 | 10.4% |
| Spinal Fusion Except Cervical WO MCC (460) | 313 | 32 | 10.2% |
| Syncope & Collapse (312) | 183 | 46 | 25.1% |
| Other | 7,691 | 1,038 | 13.5% |
| TOS Code | | | |

| Variable | Claims Reviewed | Claims Containing Errors | Percent of Claims Containing Errors |
|--|-----------------|--------------------------|-------------------------------------|
| All Codes With Less Than 30 Claims | 1,567 | 172 | 11.0% |
| Degenerative Nervous System Disorders (056, 057) | 286 | 73 | 25.5% |
| Endovascular Cardiac Valve Replacement (266, 267) | 246 | 49 | 19.9% |
| Esophagitis, Gastroent & Misc Digest Disorders (391, 392) | 314 | 40 | 12.7% |
| Major Joint Replacement Or Reattachment Of Lower Extremity (469, 470) | 428 | 41 | 9.6% |
| Other Vascular Procedures (252, 253, 254) | 220 | 21 | 9.5% |
| Psychoses (885) | 703 | 120 | 17.1% |
| Pulmonary Edema & Respiratory Failure (189) | 395 | 43 | 10.9% |
| Renal Failure (682, 683, 684) | 366 | 42 | 11.5% |
| Spinal Fusion Except Cervical (459, 460) | 317 | 32 | 10.1% |
| Other | 8,657 | 1,176 | 13.6% |
| Diagnosis Code | | | |
| All Codes With Less Than 30 Claims | 582 | 79 | 13.6% |
| Complications of surgical and medical care, not elsewhere classified | 734 | 85 | 11.6% |
| Ischemic heart diseases | 571 | 58 | 10.2% |
| Mood affective disorders | 351 | 66 | 18.8% |
| Osteoarthritis | 493 | 64 | 13.0% |
| Other diseases of intestines | 443 | 43 | 9.7% |
| Other diseases of the respiratory system | 510 | 50 | 9.8% |
| Other forms of heart disease | 948 | 120 | 12.7% |
| Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders | 365 | 59 | 16.2% |
| Spondylopathies | 405 | 63 | 15.6% |
| Other | 8,097 | 1,122 | 13.9% |

Table N5: “Included In” and “Excluded From” the Sample

| Improper Payment Rate | Paid Line Items | Unpaid Line Items | Denied For Non-Medical Reasons | Automated Medical Review Denials | No Resolution | RTP | Late Resolution | Inpt, RAPS, Tech Errors |
|-----------------------|-----------------|-------------------|--------------------------------|----------------------------------|---------------|---------|-----------------|-------------------------|
| Paid Claim | Include | Include | Include | Include | Exclude | Exclude | Exclude | Exclude |
| No Resolution | Include | Include | Include | Include | Include | Exclude | Include | Exclude |
| Provider Compliance | Include | Include | Include | Include | Exclude | Exclude | Exclude | Exclude |

The dollars in error for the improper payment rate are based on the final allowed charges. The dollars in error for the provider compliance improper payment rate are based on the initial allowed charges, which is before MAC reductions and denials. The provider compliance rate is what the improper payment rate would be without MAC activities. The No Resolution rate is based on the number of claims where the contractor cannot track the outcome of the claim divided by no resolution claims plus all claims included in the paid or provider compliance improper payment rate.

**Table N6: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate:
Part B**

| Error Type | Included | Excluded | Total | Percent Included |
|---------------------|----------|----------|--------|------------------|
| Paid | 17,037 | 842 | 17,879 | 95.3% |
| No Resolution | 17,037 | 842 | 17,879 | 95.3% |
| Provider Compliance | 17,037 | 842 | 17,879 | 95.3% |

**Table N7: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate:
DMEPOS**

| Error Type | Included | Excluded | Total | Percent Included |
|---------------------|----------|----------|--------|------------------|
| Paid | 10,981 | 364 | 11,345 | 96.8% |
| No Resolution | 10,981 | 364 | 11,345 | 96.8% |
| Provider Compliance | 10,981 | 364 | 11,345 | 96.8% |

**Table N8: Frequency of Claims “Included In” and “Excluded From” Each Improper Payment Rate:
Part A Including Hospital IPPS**

| Error Type | Included | Excluded | Total | Percent Included |
|---------------------|----------|----------|--------|------------------|
| Paid | 21,979 | 7,577 | 29,556 | 74.4% |
| No Resolution | 21,981 | 7,575 | 29,556 | 74.4% |
| Provider Compliance | 21,979 | 7,577 | 29,556 | 74.4% |

Appendix O: List of Acronyms

| Acronym | Definition |
|------------|---|
| CAT/CT/CTA | Computed Axial Tomography/Computed Tomography/Computed Tomography Angiography |
| CC | Comorbidity or Complication |
| CERT | Comprehensive Error Rate Testing |
| CMS | Centers for Medicare & Medicaid Services |
| CORF | Comprehensive Outpatient Rehabilitation Facility |
| CPAP | Continuous Positive Airway Pressure |
| DME | Durable Medical Equipment |
| DMEPOS | Durable Medical Equipment, Prosthetics, Orthotics & Supplies |
| DRG | Diagnosis Related Group |
| E&M | Evaluation and Management |
| EKG | Electrocardiogram |
| ESRD | End-Stage Renal Disease |
| FI | Fiscal Intermediary |
| FQHC | Federally Qualified Health Center |
| FY | Fiscal Year |
| HCPCS | Healthcare Common Procedure Coding System |
| HFCWO | High Frequency Chest Wall Oscillation |
| HHA | Home Health Agency |
| IDTF | Independent Diagnostic Testing Facility |
| IPPS | Inpatient Prospective Payment System |
| LSO | Lumbar-Sacral Orthosis |
| MAC | Medicare Administrative Contractor |
| MCC | Major Complication or Comorbidity |
| MRA | Magnetic Resonance Angiogram |
| MRI | Magnetic Resonance Imaging |
| MS-DRG | Medicare Severity Diagnosis Related Group |
| MV | Mechanical Ventilation |
| OPPS | Outpatient Prospective Payment System |
| OPT | Outpatient Physical Therapy |
| OR | Operating Room |
| ORF | Outpatient Rehabilitation Facility |
| RAP | Request for Advanced Payment |
| RHC | Rural Health Clinic |
| RTP | Return to Provider |
| SNF | Skilled Nursing Facility |
| TENS | Transcutaneous Electrical Nerve Stimulation |
| TOB | Type of Bill |

| Acronym | Definition |
|---------|------------------|
| TOS | Type of Service |
| W | With |
| WBC | White Blood Cell |
| WO | Without |