U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

2022 Medicare Fee-for-Service Supplemental Improper Payment Data

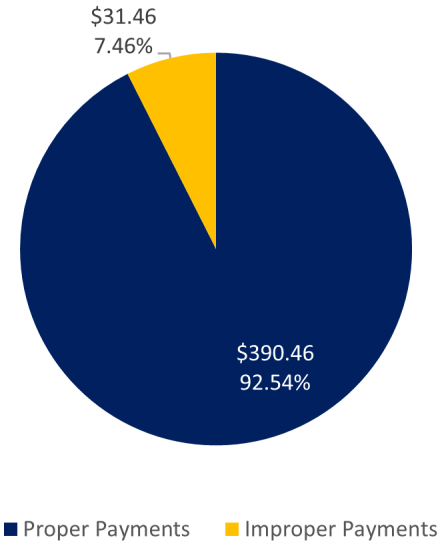
TABLE OF CONTENTS

SUMMARY OF HIGH LEVEL FINDINGS

This document supplements improper payment information in the annual HHS AFR. PIIA requires improper payment reporting in the HHS AFR. The improper payment rate calculation complies with the requirements of OMB Circular A-123, Appendix C. CMS measures the Medicare FFS improper payment rate through the CERT program.

92.54 Percent Accuracy Rate and 7.46 Percent Improper Payment Rate[1,2,3]

Figure 1: Payment Accuracy (in Billions)



[1] HHS published the 2022 Medicare FFS improper payment rate in the Federal FY 2022 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 2022 Medicare FFS improper payment rate included claims submitted during the 12-month period from July 1, 2020 through June 30, 2021.

[2] CMS adjusted the improper payment rate by 0.17 percentage points ($0.73 billion) from 7.63 percent to 7.46 percent 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 IPPS improper payment rates). This methodology is unchanged from 2012 through 2022.

[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 2022 National Improper Payments[4]

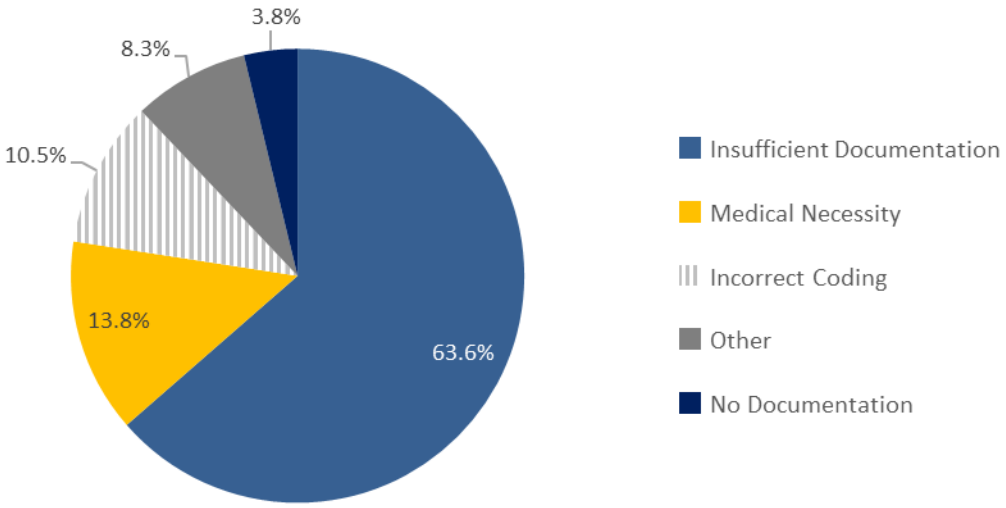
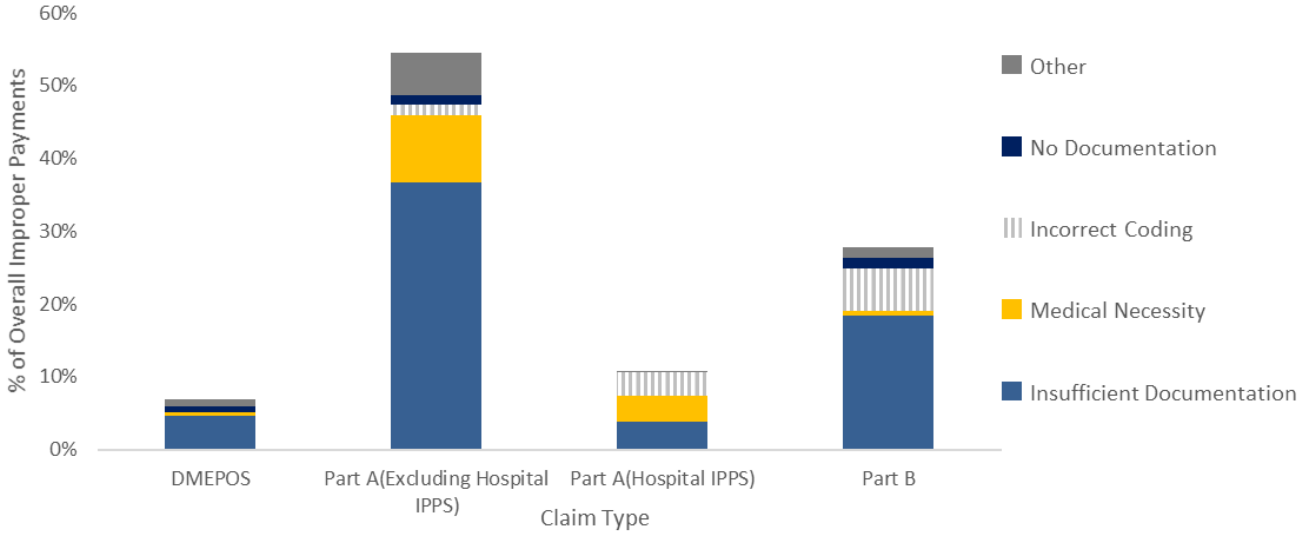


Figure 3: Improper Payment Rate Error Categories by Percentage of 2022 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling)[5]

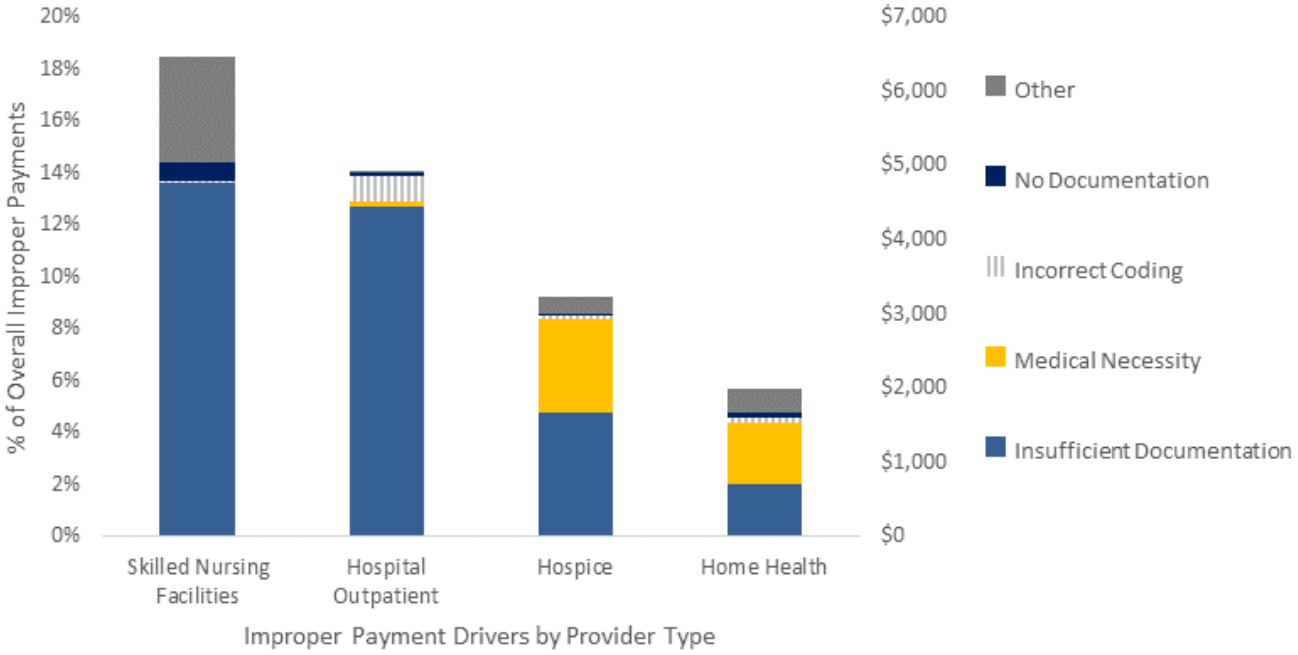


[4] The percentages in this pie chart may not add up to 100 percent due to rounding.

[5] 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 ANSI ASC X12 Health Care Claim: Institutional (837) or paper claim format 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.

Improper payment drivers are service types or provider types that make up the largest proportions of the overall CERT improper payments. For the 2022 reporting period, the Medicare FFS improper payment drivers are: Skilled Nursing Facilities, Hospital Outpatient, Hospice and Home Health. The following figure and tables will provide additional information about the improper payment drivers.

Figure 4: Improper Payment Rate Error Categories by Percentage of 2022 National Improper Payments and Improper Payments (in Millions) by Improper Payment Drivers



Skilled Nursing Facility

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 2022 report period was $5.8 billion, resulting in an improper payment rate of 15.1 percent.

Table 1: Top Root Causes for Skilled Nursing Facility

Root Cause Description	Error Category	Sample Claim Count[6]
Case Mix Group (CMG) component documentation - Missing	Insufficient Documentation	102
HIPPS level changed based on documentation submitted	Insufficient Documentation	73
Nursing home records - Missing	Insufficient Documentation	68
Order - Inadequate	Insufficient Documentation	65
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	54
Order - Missing	Insufficient Documentation	51
Physician's Certification/Recertification - Missing	Insufficient Documentation	38
Signature log to support a clear identity of an illegible signature - Missing	Insufficient Documentation	21
HIPPS/RUG level in the repository does not match the RUG level billed	Other	17
Physical/Occupational/Speech Therapy - Plan of care - Missing	Insufficient Documentation	15

[6] The root cause and error category with the highest sample claim count in Tables 1 through 4 may not correspond with the top error category of improper payments for the drivers in Figure 4.

Hospital Outpatient

Hospital Outpatient services is defined as all services billed with type of bill 12x through 19x (e.g., Hospital OPPS, Laboratory, and Others). The projected improper payment amount for Hospital Outpatient services during the 2022 report period was $4.4 billion, resulting in an improper payment rate of 5.4 percent.

Table 2: Top Root Causes for Hospital Outpatient

Root Cause Description	Error Category	Sample Claim Count
Provider's intent to order (for certain services) - Missing	Insufficient Documentation	58
Order - Missing	Insufficient Documentation	50
Order - Inadequate	Insufficient Documentation	39
Documentation to support medical necessity - Missing	Insufficient Documentation	30
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	28
Documentation for the billed date of service- Missing	Insufficient Documentation	21
Service code billed is changed to the service provided and/or ordered	Incorrect Coding	15
Attestation for unsigned documentation - Missing	Insufficient Documentation	14
Documentation for the associated diagnostic lab test(s) - Inadequate	Insufficient Documentation	12
Result of the diagnostic or laboratory test - Missing	Insufficient Documentation	12

Hospice

Hospice services is defined as all services with a provider type of Hospice, including Hospital Based Hospice and Non-Hospital Based Hospice. The projected improper payment amount for Hospice during the 2022 report period was $2.9 billion, resulting in an improper payment rate of 12.0 percent.

Table 3: Top Root Causes for Hospice

Root Cause Description	Error Category	Sample Claim Count
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	34
Documentation does not support medical necessity for the service or item billed	Medical Necessity	31
Service intensity add-on (SIA) services documentation - Missing	Insufficient Documentation	18
Beneficiary election form - Inadequate	Insufficient Documentation	11
Physician narrative as part of the certification/recertification supporting terminal illness - Inadequate	Insufficient Documentation	10
Service intensity add-on (SIA) services documentation - Inadequate	Insufficient Documentation	9
Face to face documentation - Inadequate	Insufficient Documentation	7
Physician's Certification/Recertification - Missing	Insufficient Documentation	7
Face to face documentation - Missing	Insufficient Documentation	6
Physician certification was signed and dated after the claim was submitted	Other	6

Home Health

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 2022 report period was $1.8 billion, resulting in an improper payment rate of 10.2 percent.

Table 4: Top Root Causes for Home Health

Root Cause Description	Error Category	Sample Claim Count
Medical necessity for skilled services is not supported in the medical record	Medical Necessity	124
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	26
All required content of the certification/recertification - Inadequate	Insufficient Documentation	21
HIPPS code incorrectly coded	Incorrect Coding	15
Face to face attestation - Inadequate	Insufficient Documentation	14
Documentation in the medical record supporting the HIPPS code on the claim - Missing	Insufficient Documentation	12
Certifying physician’s or acute/post-acute facility medical records - Missing	Insufficient Documentation	9
The plan of care and/or certification was signed after the claim was submitted	Other	9
Face to face documentation - Missing	Insufficient Documentation	8
Plan of care - Inadequate	Insufficient Documentation	8

Part B

The following tables show the top root causes of improper payments for the three service types in Part B with the highest projected improper payments.

Table 5: Top Root Causes for Lab tests - other (non-Medicare fee schedule)

Root Cause Description	Error Category	Sample Claim Count
Provider's intent to order (for certain services) - Missing	Insufficient Documentation	165
Documentation to support medical necessity - Missing	Insufficient Documentation	160
Risk assessment for urine drug screen - Missing	Insufficient Documentation	103
Order - Inadequate	Insufficient Documentation	100
Order - Missing	Insufficient Documentation	81
Documentation to support frequency of billing - Missing	Insufficient Documentation	76
Level of risk for urine drug screen - Missing	Insufficient Documentation	64
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	46
Result of the diagnostic or laboratory test - Missing	Insufficient Documentation	42
Documentation to support medical necessity - Inadequate	Insufficient Documentation	35

Table 6: Top Root Causes for Office visits - established

Root Cause Description	Error Category	Sample Claim Count
Documentation supports lower level of E/M service than what was billed	Incorrect Coding	114
Documentation supports higher level of E/M service than what was billed	Incorrect Coding	17
Documentation to support the services were provided or other documentation required for payment of the code - Inadequate	Insufficient Documentation	11
Separately identifiable E/M service documentation - Inadequate	Insufficient Documentation	11
Documentation for the billed date of service - Inadequate	Insufficient Documentation	9
Documentation for the billed date of service- Missing	Insufficient Documentation	8
Signature log to support a clear identity of an illegible signature - Missing	Insufficient Documentation	5
A separate and identifiable service is not supported as billed (i.e., removal of a modifier as a coding error)	Incorrect Coding	4
Attestation for unsigned documentation - Missing	Insufficient Documentation	4
Provider/supplier indicates they are unable to locate medical records for this patient/beneficiary or the provider/supplier indicates not their patient/beneficiary	No Documentation	4

Table 7: Top Root Causes for Specialist - other

Root Cause Description	Error Category	Sample Claim Count
Annual Wellness Visit (AWV) or Subsequent AWV - Inadequate	Insufficient Documentation	88
Chronic Care Management (CCM) - Care Plan provided to the beneficiary or family - Missing	Insufficient Documentation	60
Provider's intent to order (for certain services) - Missing	Insufficient Documentation	54
Order - Missing	Insufficient Documentation	51
Documentation to support medical necessity - Missing	Insufficient Documentation	29
Plan of care - Missing	Insufficient Documentation	18
Chronic Care Management (CCM) - Informed consent for services (verbal or written) - Missing	Insufficient Documentation	17
Attestation for unsigned documentation - Missing	Insufficient Documentation	13
Chronic Care Management (CCM) - Documentation of time - Missing	Insufficient Documentation	13
Documentation to support the services were provided or other documentation required for payment of the code - Inadequate	Insufficient Documentation	12

DMEPOS

The following tables show the top root causes of improper payments for the three service types in DME with the highest projected improper payments.

Table 8: Top Root Causes for CPAP

Root Cause Description	Error Category	Sample Claim Count
Documentation to support coverage criteria - Missing	Insufficient Documentation	144
Refill request - Missing	Insufficient Documentation	57
Proof of delivery - Inadequate	Insufficient Documentation	46
Order - Missing	Insufficient Documentation	22
Proof of delivery - Missing	Insufficient Documentation	21
Submitted order not written by provider listed on the claim as ordering/referring provider	Other	18
Order - Inadequate	Insufficient Documentation	18
Refill request - Inadequate	Insufficient Documentation	10
Provider orders are signed and dated after the claim was submitted	Other	6
Documentation to support coverage criteria - Inadequate	Insufficient Documentation	6

Table 9: Top Root Causes for Lower Limb Orthoses

Root Cause Description	Error Category	Sample Claim Count
Base item on the claim is denied therefore the related addition to the base, accessory, or supply fee is denied	Medical Necessity	47
Documentation to support coverage criteria - Inadequate	Insufficient Documentation	40
Documentation to support coverage criteria - Missing	Insufficient Documentation	32
Description of the modification to the orthotic at the time of fitting - Missing	Insufficient Documentation	21
Proof of delivery - Missing	Insufficient Documentation	17
Order - Missing	Insufficient Documentation	15
Proof of delivery - Inadequate	Insufficient Documentation	14
Description of the modification to the orthotic at the time of fitting - Inadequate	Insufficient Documentation	10
Attestation for unsigned documentation - Missing	Insufficient Documentation	7
Documentation does not support medical necessity for the service or item billed	Medical Necessity	7

Table 10: Top Root Causes for Infusion Pumps & Related Drugs

Root Cause Description	Error Category	Sample Claim Count
Refill request - Inadequate	Insufficient Documentation	27
Refill request - Missing	Insufficient Documentation	20
Proof of delivery - Inadequate	Insufficient Documentation	18
Units of service (UOS) ordered does not support the units of service (UOS) provided and billed	Insufficient Documentation	17
Proof of delivery - Missing	Insufficient Documentation	13
Order - Inadequate	Insufficient Documentation	13
The date of delivery was not supported by the submitted documentation	Other	11
Order - Missing	Insufficient Documentation	7
Base item on the claim is denied therefore the related addition to the base, accessory, or supply fee is denied	Medical Necessity	6
Units of service (UOS) incorrectly coded - Downcode[7]	Incorrect Coding	5

[7] These errors correspond to claims that were billed at a higher level service or a service with a higher payment than is supported by the medical record documentation, and were subsequently downcoded after medical review.

Part A (Excluding Hospital IPPS)

The provider types in Part A (Excluding Hospital IPPS) with the highest projected improper are also the top overall improper payment drivers. Please refer to Tables 1-4 for the top root causes of improper payments for Part A (Excluding Hospital IPPS) provider types.

Part A (Hospital IPPS)

The following tables show the top root causes of improper payments for the three service types payments in Part A (Hospital IPPS) with the highest projected improper payments.

Table 11: Top Root Causes for Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)

Root Cause Description	Error Category	Sample Claim Count
Inpatient admission not medically necessary and the invasive procedure should have been billed as an outpatient procedure	Medical Necessity	225
Discharge status incorrectly coded	Incorrect Coding	52
Documentation to support medical necessity for the procedure - Missing	Insufficient Documentation	34
Radiographs to support medical necessity for the billed surgical procedure(s) - Missing	Insufficient Documentation	15
Documentation to support conservative treatment for the billed surgical procedure(s) - Missing	Insufficient Documentation	5
Preoperative surgeon's office notes - Missing	Insufficient Documentation	5
Radiographs to support medical necessity for the billed surgical procedure(s) - Inadequate	Insufficient Documentation	2
Incorrectly coded procedure - DRG change	Incorrect Coding	2
Documentation to support conservative treatment for the billed surgical procedure(s) - Inadequate	Insufficient Documentation	1
Preoperative surgeon's office notes - Inadequate	Insufficient Documentation	1

Table 12: Top Root Causes for Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)

Root Cause Description	Error Category	Sample Claim Count
Documentation to support medical necessity for the procedure - Missing	Insufficient Documentation	35
Preoperative surgeon's office notes - Missing	Insufficient Documentation	26
Discharge status incorrectly coded	Incorrect Coding	23
Documentation does not support medical necessity for the service or item billed	Medical Necessity	3
Procedure not medically necessary	Medical Necessity	2
Incorrect secondary diagnosis code- DRG change	Incorrect Coding	2
Preoperative surgeon's office notes - Inadequate	Insufficient Documentation	1
Incorrectly coded procedure - DRG change	Incorrect Coding	1
Inpatient readmission was not on the same day as discharge from the prior admission	Other	1
NCD requirement(s), other documentation required for payment - Inadequate	Insufficient Documentation	1

Table 13: Top Root Causes for Percutaneous Intracardiac Procedures (273, 274)

Root Cause Description	Error Category	Sample Claim Count
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	40
NCD requirement(s), other documentation required for payment - Inadequate	Insufficient Documentation	5
Inpatient admission not medically necessary and the invasive procedure should have been billed as an outpatient procedure	Medical Necessity	4
Documentation to support medical necessity for the procedure - Missing	Insufficient Documentation	2
Discharge status incorrectly coded	Incorrect Coding	2
History & Physical (H&P) - Inadequate	Insufficient Documentation	1
Preoperative surgeon's office notes - Inadequate	Insufficient Documentation	1
Preoperative surgeon's office notes - Missing	Insufficient Documentation	1
Procedure not medically necessary	Medical Necessity	1
Documentation for the billed date of service- Missing	Insufficient Documentation	1

COVID-19 Impact

In August 2020, CMS resumed CERT program activities that had been paused in response to COVID-19, thus impacting the FY 2022 report period. As a result, the FY 2022 rate reflects CERT program processes that had a two-month delay in contacting providers and suppliers for documentation, and an adjusted sample size. In addition, the waivers and flexibilities provided by CMS for providers and suppliers during the COVID-19 public health emergency apply to all claims in the FY 2022 report period.

SUPPLEMENTAL STATISTICAL REPORTING

Appendix A: Summary of Projected Improper Payments Adjusted for A/B Rebill[8]

Table A1: 2022 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 Payments	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Part A (Total)	28,676	18,528	$306.6	$20.5	6.7%	6.0% - 7.4%	65.2%
Part A (Excluding Hospital IPPS)	8,001	7,088	$193.4	$17.1	8.9%	7.8% - 10.0%	54.5%
Part A (Hospital IPPS)	20,675	11,440	$113.3	$3.4	3.0%	2.4% - 3.5%	10.8%
Part B	14,420	14,072	$106.6	$8.8	8.2%	7.4% - 9.1%	27.8%
DMEPOS	9,605	9,398	$8.7	$2.2	25.2%	23.2% - 27.3%	7.0%
Total	**52,701**	**41,998**	**$421.9**	**$31.5**	**7.5%**	**6.9% - 8.0%**	**100.0%**

Table A2: Comparison of 2021 and 2022 Overall Improper Payment Rates by Error Category (Adjusted for Impact of A/B Rebilling)

Error Category	2021	2022				
	Overall	Overall	Part A Excluding Hospital IPPS	Part A Hospital IPPS	Part B	DMEPOS
No Documentation	0.3%	0.3%	0.1%	0.0%	0.1%	0.1%
Insufficient Documentation	4.0%	4.7%	2.7%	0.3%	1.4%	0.3%
Medical Necessity	0.8%	1.0%	0.7%	0.3%	0.0%	0.0%
Incorrect Coding	0.7%	0.8%	0.1%	0.2%	0.4%	0.0%
Other	0.4%	0.6%	0.4%	0.0%	0.1%	0.1%
Total	**6.3%**	**7.5%**	**4.1%**	**0.8%**	**2.1%**	**0.5%**

[8] Adjusted for Medicare Part A to B rebilling of denied inpatient hospital claims.

Table A3: Improper Payment Rate Categories by Percentage of 2022 Overall Improper Payments (Adjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	3.8%
Insufficient Documentation	63.6%
Medical Necessity	13.8%
Incorrect Coding	10.5%
Other	8.3%
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	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate
Part A (Total)	$306.6	$20.5	6.7%	$19.9	6.5%	$0.6	0.2%
Part A (Excluding Hospital IPPS)	$193.4	$17.1	8.9%	$16.9	8.7%	$0.3	0.1%
Part A (Hospital IPPS)	$113.3	$3.4	3.0%	$3.1	2.7%	$0.3	0.3%
Part B	$106.6	$8.8	8.2%	$8.6	8.0%	$0.2	0.2%
DMEPOS	$8.7	$2.2	25.2%	$2.2	25.0%	$0.0	0.2%
Total	**$421.9**	**$31.5**	**7.5%**	**$30.7**	**7.3%**	**$0.8**	**0.2%**

Table A5: 2022 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	$0.2	$0.1	$0.1	$0.0	$0.4	$0.2	$0.1	$1.2
Insufficient Documentation	$1.4	$0.6	$6.2	$1.6	$3.9	$4.3	$2.0	$20.0
Medical Necessity	$0.1	$0.7	$1.2	$2.1	$0.0	$0.0	$0.2	$4.4
Incorrect Coding	$0.0	$0.1	$0.4	$1.0	$1.6	$0.0	$0.2	$3.3
Other	$0.3	$0.3	$0.3	$0.0	$0.4	$1.3	$0.1	$2.6
Total	**$2.2**	**$1.8**	**$8.1**	**$4.7**	**$6.3**	**$5.8**	**$2.6**	**$31.5**

Table A6: Summary of National Improper Payment Rates by Year and by Error Category (Adjusted for Impact of A/B Rebilling)[9]

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[10]	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[11]	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[12]	Gross	0.2%	4.3%	3.0%	1.0%	0.1%	8.6%	91.4%
2012[13]	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%	12.09%	87.91%
2016	Gross	0.1%	7.2%	2.2%	1.1%	0.4%	11.00%	89.00%
2017	Gross	0.2%	6.1%	1.7%	1.2%	0.3%	9.51%	90.49%
2018	Gross	0.2%	4.7%	1.7%	1.0%	0.5%	8.12%	91.88%
2019	Gross	0.1%	4.3%	1.4%	1.0%	0.4%	7.25%	92.75%
2020	Gross	0.3%	4.0%	1.0%	0.7%	0.3%	6.27%	93.73%
2021	Gross	0.3%	4.0%	0.8%	0.7%	0.4%	6.26%	93.74%
2022	Gross	0.3%	4.7%	1.0%	0.8%	0.6%	7.46%	92.54%

[9] 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.
[10] FY 1996-2003 Improper payments were calculated as Overpayments - Underpayments
[11] FY 2004-2022 Improper payments were calculated as Overpayments + Underpayments
[12] The FY 2011 improper payment rate reported in this table is adjusted for the prospective impact of late appeals and documentation.
[13] The FY 2012-2022 improper payment rates reported in this table are adjusted for the impact of denied Part A inpatient claims under Part B.

Table A7: 2022 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 Payments	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
DMEPOS	9,398	$8.7	$2.2	25.2%	23.2% - 27.3%	7.0%
Home Health & Hospice	1,745	$41.6	$4.7	11.2%	9.4% - 13.1%	14.9%
Parts A & B (Excluding Home Health & Hospice)	30,855	$371.7	$24.6	6.6%	6.0% - 7.2%	78.2%
Total	**41,998**	**$421.9**	**$31.5**	**7.5%**	**6.9% - 8.0%**	**100.0%**

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

Table B1: 2022 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 Payments	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Part A (Total)	28,676	18,528	$306.6	$21.2	6.9%	6.2% - 7.7%	66.0%
Part A (Excluding Hospital IPPS)	8,001	7,088	$193.4	$17.1	8.9%	7.8% - 10.0%	53.2%
Part A (Hospital IPPS)	20,675	11,440	$113.3	$4.1	3.6%	3.0% - 4.2%	12.8%
Part B	14,420	14,072	$106.6	$8.8	8.2%	7.4% - 9.1%	27.2%
DMEPOS	9,605	9,398	$8.7	$2.2	25.2%	23.2% - 27.3%	6.8%
Total	**52,701**	**41,998**	**$421.9**	**$32.2**	**7.6%**	**7.1% - 8.2%**	**100.0%**

Table B2: Comparison of 2021 and 2022 Overall Improper Payment Rates by Error Category (Unadjusted for Impact of A/B Rebilling)

Error Category	2021	2022				
	Overall	Overall	Part A Excluding Hospital IPPS	Part A Hospital IPPS	Part B	DMEPOS
No Documentation	0.3%	0.3%	0.1%	0.0%	0.1%	0.1%
Insufficient Documentation	4.0%	4.7%	2.7%	0.3%	1.4%	0.3%
Medical Necessity	1.0%	1.2%	0.7%	0.4%	0.0%	0.0%
Incorrect Coding	0.7%	0.8%	0.1%	0.2%	0.4%	0.0%
Other	0.4%	0.6%	0.4%	0.0%	0.1%	0.1%
Total	**6.4%**	**7.6%**	**4.1%**	**1.0%**	**2.1%**	**0.5%**

Table B3: Improper Payment Rate Categories by Percentage of 2022 Overall Improper Payments (Unadjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	3.7%
Insufficient Documentation	62.1%
Medical Necessity	15.8%
Incorrect Coding	10.3%
Other	8.1%
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)	$306.6	$21.2	6.9%	$20.7	6.7%	$0.6	0.2%
Part A (Excluding Hospital IPPS)	$193.4	$17.1	8.9%	$16.9	8.7%	$0.3	0.1%
Part A (Hospital IPPS)	$113.3	$4.1	3.6%	$3.8	3.3%	$0.3	0.3%
Part B	$106.6	$8.8	8.2%	$8.6	8.0%	$0.2	0.2%
DMEPOS	$8.7	$2.2	25.2%	$2.2	25.0%	$0.0	0.2%
Total	**$421.9**	**$32.2**	**7.6%**	**$31.4**	**7.4%**	**$0.8**	**0.2%**

Table B5: 2022 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	$0.3	$0.1	$0.1	$0.1	$0.4	$0.2	$0.1	$1.2
Insufficient Documentation	$1.5	$0.6	$6.2	$1.6	$3.9	$4.3	$2.0	$20.0
Medical Necessity	$0.2	$0.8	$1.2	$2.8	$0.0	$0.0	$0.2	$5.1
Incorrect Coding	$0.0	$0.1	$0.4	$1.0	$1.6	$0.0	$0.2	$3.3
Other	$0.3	$0.3	$0.3	$0.0	$0.4	$1.3	$0.1	$2.6
Total	**$2.2**	**$1.8**	**$8.1**	**$5.5**	**$6.3**	**$5.8**	**$2.6**	**$32.2**

Table B6: Summary of National Improper Payment Rates by Year and by Error Category (Unadjusted for Impact of A/B Rebilling)[14]

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[15]	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[16]	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%	12.47%	87.53%
2016	Gross	0.1%	7.2%	2.4%	1.1%	0.4%	11.19%	88.81%
2017	Gross	0.2%	6.1%	1.8%	1.2%	0.3%	9.64%	90.36%
2018	Gross	0.2%	4.7%	1.9%	1.0%	0.5%	8.27%	91.73%
2019	Gross	0.1%	4.3%	1.6%	1.0%	0.4%	7.45%	92.55%
2020	Gross	0.3%	4.0%	1.3%	0.7%	0.3%	6.56%	93.44%
2021	Gross	0.3%	4.0%	1.0%	0.7%	0.4%	6.44%	93.56%
2022	Gross	0.3%	4.7%	1.2%	0.8%	0.6%	7.63%	92.37%

[14] 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.
[15] FY 1996-2003 Improper payments were calculated as Overpayments - Underpayments
[16] FY 2004-2022 Improper payments were calculated as Overpayments + absolute value of Underpayments

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

Part A (Hospital IPPS) Length of Stay	Claims Reviewed	Improper Payment Rate	Projected Improper Payments	Percent of Overall Improper Payments
Medicare FFS	**41,998**	**7.6%**	**$32.2**	**100.0%**
Overall Part A (Hospital IPPS)	**11,440**	**3.6%**	**$4.1**	**12.8%**
0 or 1 day	1,828	20.1%	$1.5	4.7%
2 days	1,893	4.1%	$0.5	1.5%
3 days	1,665	2.6%	$0.3	1.0%
4 days	1,353	3.2%	$0.3	1.0%
5 days	932	1.6%	$0.2	0.5%
More than 5 days	3,769	2.1%	$1.3	4.0%

All estimates in Tables B8-B11 are based on a minimum of 30 lines in the sample.

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
CA	3,959	$3,749.6	8.5%	6.6% - 10.3%	11.6%
TX	3,003	$3,532.3	11.9%	8.4% - 15.3%	11.0%
FL	3,286	$2,706.9	8.6%	6.0% - 11.1%	8.4%
NY	2,432	$1,416.8	4.8%	3.5% - 6.1%	4.4%
NJ	1,248	$1,379.6	11.9%	6.9% - 16.9%	4.3%
OH	1,558	$1,352.7	9.0%	5.6% - 12.4%	4.2%
PA	1,814	$1,336.3	7.4%	5.5% - 9.3%	4.2%
GA	1,158	$1,218.9	10.7%	7.1% - 14.2%	3.8%
IL	1,737	$1,100.9	5.9%	3.2% - 8.5%	3.4%
MD	1,028	$954.5	8.3%	5.0% - 11.5%	3.0%
NC	1,379	$915.5	7.4%	4.4% - 10.4%	2.8%
KY	678	$861.8	14.2%	8.6% - 19.9%	2.7%
AL	706	$825.9	9.9%	5.9% - 13.8%	2.6%
MI	1,198	$817.8	7.5%	3.5% - 11.6%	2.5%
CO	545	$688.4	11.1%	3.0% - 19.1%	2.1%
MA	1,126	$640.0	5.2%	2.7% - 7.6%	2.0%
VA	1,096	$621.2	6.5%	4.2% - 8.8%	1.9%
NV	364	$563.9	16.0%	7.3% - 24.7%	1.8%
IN	914	$546.9	6.3%	3.0% - 9.5%	1.7%
MO	896	$533.9	6.3%	3.0% - 9.7%	1.7%
OK	653	$527.5	8.1%	4.4% - 11.9%	1.6%
SC	743	$486.5	7.1%	4.3% - 9.9%	1.5%
LA	657	$454.5	5.7%	2.9% - 8.5%	1.4%
AZ	876	$449.6	5.0%	2.7% - 7.3%	1.4%
TN	1,125	$423.6	3.7%	2.4% - 4.9%	1.3%
SD	183	$358.4	17.9%	2.9% - 33.0%	1.1%
AR	516	$314.1	8.0%	4.7% - 11.3%	1.0%
WA	737	$302.4	4.5%	2.1% - 6.8%	0.9%
MS	521	$302.0	7.1%	3.7% - 10.6%	0.9%
OR	404	$288.9	8.4%	2.7% - 14.2%	0.9%
MN	606	$281.9	4.7%	0.8% - 8.5%	0.9%
WI	681	$281.7	3.7%	1.5% - 5.8%	0.9%
NM	215	$268.7	16.3%	8.7% - 23.9%	0.8%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
KS	529	$252.6	5.4%	1.1% - 9.6%	0.8%
IA	495	$203.3	4.6%	1.6% - 7.6%	0.6%
NE	304	$201.5	6.0%	2.1% - 9.9%	0.6%
UT	304	$144.0	5.7%	1.9% - 9.4%	0.5%
CT	399	$104.4	3.0%	1.5% - 4.5%	0.3%
WV	280	$99.7	3.8%	1.6% - 5.9%	0.3%
DE	201	$98.3	5.5%	1.6% - 9.3%	0.3%
MT	139	$97.7	8.9%	(4.2%) - 22.0%	0.3%
ID	203	$89.7	2.9%	(0.5%) - 6.2%	0.3%
NH	223	$84.4	3.9%	(1.9%) - 9.8%	0.3%
AK	62	$57.5	8.4%	(0.1%) - 16.8%	0.2%
PR	45	$45.5	11.5%	0.9% - 22.1%	0.1%
HI	88	$44.7	6.3%	(0.3%) - 12.9%	0.1%
VT	85	$34.2	4.6%	(1.3%) - 10.5%	0.1%
ME	160	$33.6	2.5%	0.5% - 4.5%	0.1%
DC	73	$30.9	8.1%	1.5% - 14.6%	0.1%
WY	96	$18.7	3.5%	0.9% - 6.1%	0.1%
ND	149	$10.2	1.0%	(0.2%) - 2.2%	0.0%
RI	111	$9.0	1.1%	0.3% - 1.9%	0.0%
All States	**41,998**	**$32,187.7**	**7.6%**	**7.1% - 8.2%**	**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
CA	3,007	$2,855.0	7.4%	5.5% - 9.3%	8.9%
TX	2,183	$2,472.4	9.8%	5.9% - 13.7%	7.7%
FL	2,443	$2,109.8	8.0%	5.0% - 10.9%	6.6%
OH	1,156	$1,259.9	9.3%	5.6% - 13.0%	3.9%
NJ	950	$1,220.3	11.5%	6.3% - 16.6%	3.8%
NY	1,867	$1,168.6	4.1%	2.8% - 5.4%	3.6%
PA	1,382	$1,066.6	6.5%	4.7% - 8.3%	3.3%
GA	862	$908.4	9.2%	5.8% - 12.7%	2.8%
MD	789	$897.4	8.3%	4.8% - 11.8%	2.8%
IL	1,274	$845.6	5.1%	2.2% - 7.9%	2.6%
KY	464	$709.7	13.1%	7.1% - 19.0%	2.2%
AL	492	$675.1	10.4%	5.8% - 14.9%	2.1%
MI	841	$618.8	6.6%	2.2% - 11.0%	1.9%
NC	998	$586.9	5.6%	3.1% - 8.2%	1.8%
CO	402	$555.3	9.9%	1.3% - 18.5%	1.7%
MA	862	$542.6	4.8%	2.1% - 7.4%	1.7%
NV	275	$469.1	16.2%	6.0% - 26.4%	1.5%
IN	640	$460.2	5.9%	2.3% - 9.5%	1.4%
VA	771	$459.2	5.5%	3.2% - 7.9%	1.4%
MO	647	$436.8	5.9%	2.3% - 9.4%	1.4%
SC	524	$387.1	6.5%	3.6% - 9.4%	1.2%
LA	453	$359.9	5.5%	2.2% - 8.8%	1.1%
TN	887	$356.3	3.3%	2.1% - 4.6%	1.1%
SD	152	$349.7	17.8%	2.5% - 33.2%	1.1%
AZ	669	$346.1	4.5%	2.1% - 6.9%	1.1%
OK	419	$328.2	6.0%	2.4% - 9.5%	1.0%
NM	150	$251.2	18.4%	9.4% - 27.3%	0.8%
AR	367	$249.5	7.2%	4.0% - 10.5%	0.8%
WA	539	$249.1	4.0%	1.6% - 6.4%	0.8%
MN	434	$222.1	4.2%	(0.1%) - 8.4%	0.7%
KS	403	$219.0	5.0%	0.5% - 9.6%	0.7%
MS	348	$206.3	5.5%	2.2% - 8.8%	0.6%
NE	223	$193.9	6.1%	2.0% - 10.2%	0.6%
IA	330	$178.9	4.7%	1.3% - 8.1%	0.6%
OR	266	$159.7	5.7%	0.2% - 11.2%	0.5%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
WI	478	$141.1	2.2%	0.6% - 3.7%	0.4%
UT	214	$105.6	4.6%	1.7% - 7.5%	0.3%
ID	149	$88.8	3.1%	(0.6%) - 6.9%	0.3%
MT	92	$87.7	8.6%	(5.5%) - 22.7%	0.3%
CT	287	$84.9	2.8%	1.1% - 4.5%	0.3%
NH	177	$83.0	4.3%	(2.2%) - 10.8%	0.3%
WV	203	$79.6	3.2%	1.1% - 5.4%	0.3%
DE	151	$59.6	3.7%	1.1% - 6.2%	0.2%
AK	39	$57.3	8.5%	(0.1%) - 17.1%	0.2%
HI	69	$41.8	7.0%	(0.8%) - 14.8%	0.1%
PR	31	$30.1	11.3%	(1.4%) - 24.1%	0.1%
ME	114	$28.7	2.5%	0.2% - 4.7%	0.1%
DC	53	$28.0	8.2%	0.9% - 15.5%	0.1%
WY	60	$10.8	2.4%	0.1% - 4.7%	0.0%
ND	122	$8.5	0.9%	(0.3%) - 2.1%	0.0%
RI	85	$6.6	1.2%	0.1% - 2.2%	0.0%
VT	54	$3.3	0.6%	(0.3%) - 1.5%	0.0%
All States	**30,855**	**$25,323.7**	**6.8%**	**6.2% - 7.4%**	**78.7%**

Table B10: Medicare FFS Projected Improper Payments by State – DMEPOS Only (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
FL	708	$247.0	37.4%	29.5% - 45.2%	0.8%
TX	508	$177.2	27.6%	14.6% - 40.5%	0.6%
CA	779	$170.2	22.5%	17.5% - 27.6%	0.5%
NY	523	$104.8	26.8%	20.6% - 33.0%	0.3%
PA	389	$100.3	33.9%	22.0% - 45.8%	0.3%
IL	397	$83.9	18.2%	5.9% - 30.5%	0.3%
MA	227	$78.8	33.6%	10.0% - 57.2%	0.2%
NC	331	$77.2	28.0%	19.8% - 36.3%	0.2%
OH	338	$76.7	30.9%	22.2% - 39.5%	0.2%
MI	313	$70.4	26.8%	18.1% - 35.6%	0.2%
GA	246	$63.9	27.9%	18.6% - 37.2%	0.2%
VA	282	$57.1	23.9%	16.2% - 31.6%	0.2%
KY	197	$52.8	29.8%	19.8% - 39.9%	0.2%
NJ	273	$51.8	22.7%	15.7% - 29.7%	0.2%
TN	210	$50.3	24.9%	14.9% - 35.0%	0.2%
IN	248	$47.1	20.2%	13.4% - 26.9%	0.2%
SC	189	$46.6	26.7%	15.5% - 37.9%	0.1%
OK	152	$42.8	23.6%	11.8% - 35.4%	0.1%
LA	141	$42.2	34.9%	20.0% - 49.9%	0.1%
AZ	166	$38.7	25.3%	14.4% - 36.1%	0.1%
MS	158	$38.5	21.0%	11.3% - 30.7%	0.1%
MD	223	$38.0	24.1%	16.0% - 32.2%	0.1%
MN	148	$34.5	31.5%	12.3% - 50.8%	0.1%
WA	180	$32.4	19.0%	10.2% - 27.7%	0.1%
MO	229	$31.8	13.4%	7.7% - 19.0%	0.1%
AR	138	$31.6	22.7%	12.3% - 33.0%	0.1%
WI	171	$31.0	19.9%	11.4% - 28.4%	0.1%
KS	109	$27.2	27.8%	14.8% - 40.7%	0.1%
OR	124	$26.0	20.7%	9.3% - 32.2%	0.1%
CO	124	$25.6	18.6%	6.4% - 30.8%	0.1%
IA	149	$23.8	17.7%	5.9% - 29.6%	0.1%
AL	163	$23.1	16.3%	9.1% - 23.5%	0.1%
WV	72	$20.1	51.9%	27.5% - 76.3%	0.1%
CT	102	$18.0	32.7%	19.4% - 46.0%	0.1%
NM	54	$16.2	28.6%	9.2% - 48.1%	0.1%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
DE	46	$13.3	23.6%	1.5% - 45.7%	0.0%
NV	64	$11.8	16.5%	1.8% - 31.2%	0.0%
MT	46	$10.0	29.5%	3.2% - 55.7%	0.0%
WY	34	$7.9	27.0%	4.6% - 49.3%	0.0%
UT	81	$5.6	8.0%	0.6% - 15.3%	0.0%
NE	74	$5.2	8.5%	2.1% - 14.8%	0.0%
ME	42	$5.0	13.5%	1.6% - 25.4%	0.0%
NH	40	$1.4	3.4%	(0.8%) - 7.7%	0.0%
ID	45	$0.8	1.6%	(0.5%) - 3.7%	0.0%
All States (Incl. States Not Listed)	**9,398**	**$2,190.1**	**25.2%**	**23.2% - 27.3%**	**6.8%**

Table B11: Medicare FFS Projected Improper Payments by State – Home Health and Hospice Only (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	312	$882.7	23.1%	16.0% - 30.2%	2.7%
CA	173	$724.4	14.3%	7.7% - 20.9%	2.3%
FL	135	$350.1	7.9%	3.3% - 12.5%	1.1%
NC	50	$251.4	15.2%	0.3% - 30.1%	0.8%
GA	50	$246.6	17.9%	3.1% - 32.7%	0.8%
IL	66	$171.4	10.7%	2.7% - 18.7%	0.5%
PA	43	$169.5	13.0%	1.4% - 24.5%	0.5%
OK	82	$156.5	19.7%	4.9% - 34.5%	0.5%
NY	42	$143.3	14.3%	4.8% - 23.7%	0.5%
MI	44	$128.6	10.5%	(1.1%) - 22.1%	0.4%
AL	51	$127.7	7.5%	(1.0%) - 15.9%	0.4%
WI	32	$109.5	10.5%	(0.9%) - 21.9%	0.3%
VA	43	$104.9	9.9%	1.6% - 18.2%	0.3%
AZ	41	$64.8	5.8%	(2.1%) - 13.8%	0.2%
LA	63	$52.4	4.0%	0.0% - 8.0%	0.2%
MA	37	$18.6	2.4%	(2.3%) - 7.1%	0.1%
OH	64	$16.1	1.3%	(0.5%) - 3.1%	0.1%
All States (Incl. States Not Listed)	**1,745**	**$4,673.8**	**11.2%**	**9.4% - 13.1%**	**14.5%**

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

Service Label	PFS Amount	Error Rate	Confidence Interval
Destroy c/th facet jnt addl (64634)	$271.7	30.8%	22.2% - 39.5%
Destroy cerv/thor facet jnt (64633)	$458.9	25.9%	18.3% - 33.5%

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	
Lab tests - other (non-Medicare fee schedule)	$1,185,426,655	26.4%	21.8% - 31.1%	3.8%	91.2%	0.1%	0.0%	4.9%	3.7%
Office visits - established	$755,705,932	5.2%	4.0% - 6.4%	9.9%	27.3%	0.2%	59.0%	3.6%	2.3%
Specialist - other	$623,559,793	24.5%	17.6% - 31.4%	3.2%	80.8%	0.0%	3.0%	13.1%	1.9%
Minor procedures - other (Medicare fee schedule)	$580,266,233	13.1%	10.4% - 15.7%	0.6%	86.2%	6.8%	2.6%	3.9%	1.8%
Hospital visit - initial	$517,687,780	20.9%	17.8% - 24.0%	5.2%	33.2%	0.0%	58.7%	2.8%	1.6%
Hospital visit - subsequent	$513,271,531	10.3%	7.6% - 12.9%	4.7%	40.4%	0.0%	41.8%	13.1%	1.6%
Ambulance	$356,181,558	8.8%	4.2% - 13.3%	14.2%	48.8%	34.3%	2.7%	0.0%	1.1%
Office visits - new	$269,421,546	9.8%	6.9% - 12.7%	2.8%	19.0%	0.0%	63.1%	15.2%	0.8%
Nursing home visit	$251,050,202	13.0%	6.7% - 19.3%	4.4%	23.8%	0.0%	67.7%	4.0%	0.8%
Ambulatory procedures - other	$243,463,409	23.0%	10.4% - 35.6%	7.4%	90.8%	0.3%	0.0%	1.6%	0.8%
Emergency room visit	$233,323,950	13.5%	8.8% - 18.2%	0.0%	21.4%	0.0%	65.5%	13.2%	0.7%
Other drugs	$198,897,627	1.6%	0.8% - 2.5%	5.4%	77.2%	4.5%	6.4%	6.4%	0.6%
Specialist - psychiatry	$184,714,148	13.6%	7.2% - 20.0%	8.5%	83.1%	0.0%	1.9%	6.5%	0.6%
Hospital visit - critical care	$176,379,408	16.0%	12.2% - 19.8%	6.6%	18.3%	0.0%	73.9%	1.2%	0.5%
Major procedure - Other	$173,391,673	10.1%	(1.6%) - 21.8%	7.2%	91.4%	0.0%	0.5%	0.9%	0.5%
Advanced imaging - CAT/CT/CTA: other	$170,411,163	13.4%	2.8% - 24.1%	5.5%	94.5%	0.0%	0.0%	0.0%	0.5%
Chiropractic	$161,340,225	31.3%	24.3% - 38.3%	2.3%	88.5%	4.1%	3.8%	1.2%	0.5%
Other tests - other	$156,512,209	11.6%	6.0% - 17.2%	3.4%	94.3%	0.0%	0.0%	2.4%	0.5%
Standard imaging - nuclear medicine	$147,047,958	9.1%	6.4% - 11.8%	2.5%	96.1%	0.0%	1.4%	0.0%	0.5%
Eye procedure - cataract removal/lens insertion	$146,067,233	8.3%	3.8% - 12.8%	0.0%	100.0%	0.0%	0.0%	0.0%	0.5%
All Type of Services (Incl. Codes Not Listed)	**$8,753,157,339**	**8.2%**	**7.4% - 9.1%**	**5.6%**	**66.3%**	**2.1%**	**21.0%**	**5.1%**	**27.2%**

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

DMEPOS (Policy Group)	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	
CPAP	$247,038,822	24.1%	19.4% - 28.8%	0.7%	87.5%	0.0%	0.1%	11.7%	0.8%
All Policy Groups with Less than 30 Claims	$211,837,910	31.2%	13.8% - 48.7%	18.2%	75.2%	2.5%	0.1%	4.0%	0.7%
Lower Limb Orthoses	$187,849,948	57.5%	49.9% - 65.2%	40.8%	45.8%	7.7%	0.1%	5.6%	0.6%
Infusion Pumps & Related Drugs	$118,403,383	18.3%	12.1% - 24.6%	7.9%	65.5%	8.0%	1.8%	16.8%	0.4%
Surgical Dressings	$116,939,403	41.8%	34.2% - 49.4%	8.8%	70.6%	2.8%	3.7%	14.2%	0.4%
Ventilators	$108,208,116	20.1%	15.5% - 24.7%	7.3%	67.9%	2.0%	0.0%	22.8%	0.3%
Glucose Monitor	$105,882,839	18.5%	13.9% - 23.0%	8.2%	77.8%	7.0%	0.1%	6.9%	0.3%
Lower Limb Prostheses	$96,418,604	25.1%	17.3% - 32.8%	0.0%	80.5%	0.0%	0.0%	19.5%	0.3%
Oxygen Supplies/Equipment	$92,948,439	15.3%	10.8% - 19.8%	0.0%	66.8%	0.0%	0.0%	33.2%	0.3%
Urological Supplies	$87,135,118	24.9%	17.3% - 32.5%	0.0%	64.4%	1.5%	9.0%	25.2%	0.3%
LSO	$78,264,550	51.7%	43.3% - 60.0%	45.7%	38.9%	7.5%	0.0%	7.8%	0.2%
Nebulizers & Related Drugs	$77,952,039	10.9%	7.5% - 14.4%	0.0%	61.9%	18.6%	0.0%	19.5%	0.2%
Parenteral Nutrition	$70,411,426	33.5%	25.9% - 41.2%	0.0%	72.7%	10.8%	0.0%	16.5%	0.2%
Immunosuppressive Drugs	$63,087,097	23.7%	13.8% - 33.6%	4.6%	50.6%	12.9%	0.0%	31.9%	0.2%
Enteral Nutrition	$56,798,059	35.8%	25.3% - 46.3%	0.1%	43.8%	31.4%	3.1%	21.7%	0.2%
Wheelchairs Options/Accessories	$54,476,806	14.5%	4.2% - 24.9%	0.0%	61.5%	26.7%	0.3%	11.5%	0.2%
Ostomy Supplies	$53,802,322	22.4%	14.5% - 30.3%	3.3%	86.4%	0.4%	0.0%	9.9%	0.2%
Upper Limb Orthoses	$52,067,120	42.2%	31.9% - 52.6%	44.5%	45.5%	2.5%	0.0%	7.6%	0.2%
Diabetic Shoes	$46,529,682	51.4%	40.2% - 62.7%	3.6%	69.1%	1.4%	0.0%	26.0%	0.1%
Pneumatic Compression Device	$39,839,415	75.1%	61.9% - 88.4%	0.0%	61.3%	37.6%	0.0%	1.0%	0.1%
All Type of Services (Incl. Codes Not Listed)	**$2,190,116,903**	**25.2%**	**23.2% - 27.3%**	**11.2%**	**66.2%**	**6.8%**	**0.8%**	**15.1%**	**6.8%**

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	
SNF Inpatient	$5,558,211,576	15.8%	12.9% - 18.7%	3.5%	73.2%	0.0%	0.3%	23.0%	17.3%
Hospital Outpatient	$4,271,539,517	5.4%	3.4% - 7.3%	0.5%	91.0%	1.5%	6.9%	0.1%	13.3%
Nonhospital based hospice	$2,624,429,343	11.8%	8.8% - 14.8%	1.3%	49.7%	41.0%	1.3%	6.8%	8.2%
Home Health	$1,770,261,480	10.1%	7.9% - 12.3%	4.0%	34.9%	42.3%	3.0%	15.8%	5.5%
Hospital Inpatient (Part A)	$1,407,046,587	13.3%	10.2% - 16.3%	0.2%	30.3%	69.4%	0.0%	0.0%	4.4%
CAH	$502,761,424	8.1%	2.0% - 14.1%	0.0%	93.9%	0.1%	2.1%	3.9%	1.6%
Hospital based hospice	$267,026,772	14.9%	8.2% - 21.6%	0.0%	74.9%	19.9%	1.1%	4.1%	0.8%
SNF Inpatient Part B	$203,527,234	7.0%	(1.8%) - 15.7%	14.5%	84.8%	0.0%	0.0%	0.6%	0.6%
Clinic ESRD	$145,529,438	1.2%	0.2% - 2.2%	20.6%	65.8%	0.0%	0.0%	13.6%	0.5%
Hospital Other Part B	$94,865,861	16.1%	8.6% - 23.6%	0.0%	87.2%	7.4%	5.4%	0.0%	0.3%
Clinic OPT	$86,430,957	10.9%	0.3% - 21.6%	0.0%	78.9%	0.0%	0.0%	21.1%	0.3%
SNF Outpatient	$50,007,199	12.9%	1.9% - 24.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.2%
Clinical Rural Health	$45,830,474	2.8%	0.5% - 5.1%	14.6%	53.4%	0.0%	32.0%	0.0%	0.1%
Hospital Inpatient Part B	$41,172,824	5.7%	(1.7%) - 13.0%	59.7%	39.8%	0.0%	0.5%	0.0%	0.1%
FQHC	$37,497,951	3.4%	(0.7%) - 7.5%	19.0%	81.0%	0.0%	0.0%	0.0%	0.1%
All Codes With Less Than 30 Claims	$12,079,976	23.3%	(25.3%) - 71.9%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Clinic CORF	$10,896,394	47.4%	23.2% - 71.6%	0.0%	89.7%	0.0%	0.0%	10.3%	0.0%
All Type of Services (Incl. Codes Not Listed)	**$17,129,115,006**	**8.9%**	**7.8% - 10.0%**	**2.5%**	**67.4%**	**17.1%**	**2.5%**	**10.6%**	**53.2%**

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	
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	$562,559,038	22.2%	18.2% - 26.3%	0.9%	12.7%	83.5%	3.0%	0.0%	1.7%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$313,125,183	12.1%	9.2% - 15.0%	0.0%	88.8%	7.6%	2.3%	1.4%	1.0%
Percutaneous Intracardiac Procedures (273, 274)	$278,881,676	28.5%	20.4% - 36.6%	0.0%	90.0%	10.0%	0.0%	0.0%	0.9%
Psychoses (885)	$251,321,331	8.8%	(1.1%) - 18.8%	0.0%	89.3%	0.0%	10.7%	0.0%	0.8%
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	$205,027,392	13.8%	(10.7%) - 38.3%	0.0%	0.0%	0.0%	100.0%	0.0%	0.6%
Respiratory Infections & Inflammations (177, 178, 179)	$167,719,946	2.2%	0.1% - 4.3%	0.0%	3.0%	50.1%	46.9%	0.0%	0.5%
Spinal Fusion Except Cervical (459, 460)	$99,393,081	7.0%	1.8% - 12.2%	0.0%	19.9%	45.0%	35.1%	0.0%	0.3%
Other Vascular Procedures (252, 253, 254)	$67,919,657	6.0%	0.0% - 12.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.2%
Syncope & Collapse (312)	$66,774,549	16.0%	(0.2%) - 32.1%	0.0%	10.7%	89.3%	0.0%	0.0%	0.2%
Cervical Spinal Fusion (471, 472, 473)	$65,694,989	15.0%	7.2% - 22.8%	2.8%	9.9%	87.3%	0.0%	0.0%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	$65,644,997	20.9%	13.8% - 28.0%	0.0%	90.7%	6.6%	1.0%	1.6%	0.2%
Organic Disturbances & Intellectual Disability (884)	$48,211,318	8.8%	(0.6%) - 18.3%	0.0%	0.0%	43.5%	56.5%	0.0%	0.1%
GI Hemorrhage (377, 378, 379)	$41,766,580	3.1%	(0.0%) - 6.2%	0.0%	51.6%	28.2%	20.2%	0.0%	0.1%
Heart Failure & Shock (291, 292, 293)	$38,657,488	1.1%	(0.4%) - 2.6%	0.0%	0.0%	75.8%	24.2%	0.0%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$34,989,358	0.4%	(0.2%) - 0.9%	0.0%	0.0%	0.0%	100.0%	0.0%	0.1%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (004)	$33,946,222	2.5%	(1.3%) - 6.3%	0.0%	85.5%	0.0%	14.5%	0.0%	0.1%
Degenerative Nervous System Disorders (056, 057)	$33,894,367	5.0%	1.8% - 8.2%	0.0%	18.9%	73.0%	8.1%	0.0%	0.1%
Medical Back Problems (551, 552)	$32,381,024	8.5%	1.4% - 15.7%	0.0%	0.0%	100.0%	0.0%	0.0%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$31,729,876	1.6%	(0.2%) - 3.4%	12.3%	0.0%	49.8%	37.9%	0.0%	0.1%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$31,613,087	1.9%	0.5% - 3.2%	0.0%	65.2%	9.1%	25.7%	0.0%	0.1%
All Type of Services (Incl. Codes Not Listed)	**$4,115,275,186**	**3.6%**	**3.0% - 4.2%**	**1.1%**	**29.5%**	**44.4%**	**24.6%**	**0.4%**	**12.8%**

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. 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 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	
Other - non-Medicare fee schedule	42.5%	22.9% - 62.0%	0.0%	98.0%	0.5%	0.4%	1.1%	0.1%
Chiropractic	31.3%	24.3% - 38.3%	2.3%	88.5%	4.1%	3.8%	1.2%	0.5%
Lab tests - other (non-Medicare fee schedule)	26.4%	21.8% - 31.1%	3.8%	91.2%	0.1%	0.0%	4.9%	3.7%
Lab tests - bacterial cultures	26.2%	5.8% - 46.6%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Specialist - other	24.5%	17.6% - 31.4%	3.2%	80.8%	0.0%	3.0%	13.1%	1.9%
Ambulatory procedures - other	23.0%	10.4% - 35.6%	7.4%	90.8%	0.3%	0.0%	1.6%	0.8%
Standard imaging - other	21.7%	11.7% - 31.6%	0.0%	88.2%	0.0%	8.2%	3.7%	0.2%
Echography/ultrasonography - carotid arteries	21.1%	9.4% - 32.7%	18.9%	81.1%	0.0%	0.0%	0.0%	0.1%
Hospital visit - initial	20.9%	17.8% - 24.0%	5.2%	33.2%	0.0%	58.7%	2.8%	1.6%
Other - Medicare fee schedule	18.7%	5.7% - 31.6%	1.1%	90.8%	0.0%	0.0%	8.1%	0.1%
Other tests - electrocardiograms	17.2%	10.6% - 23.8%	7.1%	83.1%	0.0%	5.9%	4.0%	0.1%
Dialysis services (Medicare Fee Schedule)	17.0%	8.5% - 25.6%	4.0%	84.6%	0.0%	10.6%	0.9%	0.3%
Standard imaging - musculoskeletal	16.1%	7.0% - 25.3%	13.1%	69.4%	0.0%	4.3%	13.2%	0.2%
Hospital visit - critical care	16.0%	12.2% - 19.8%	6.6%	18.3%	0.0%	73.9%	1.2%	0.5%
Standard imaging - chest	14.1%	8.7% - 19.6%	8.3%	90.3%	0.0%	0.0%	1.4%	0.1%
Specialist - psychiatry	13.6%	7.2% - 20.0%	8.5%	83.1%	0.0%	1.9%	6.5%	0.6%
Emergency room visit	13.5%	8.8% - 18.2%	0.0%	21.4%	0.0%	65.5%	13.2%	0.7%
Advanced imaging - CAT/CT/CTA: other	13.4%	2.8% - 24.1%	5.5%	94.5%	0.0%	0.0%	0.0%	0.5%
Minor procedures - other (Medicare fee schedule)	13.1%	10.4% - 15.7%	0.6%	86.2%	6.8%	2.6%	3.9%	1.8%
Nursing home visit	13.0%	6.7% - 19.3%	4.4%	23.8%	0.0%	67.7%	4.0%	0.8%
Overall (incl. Service Types Not Listed)	**8.2%**	**7.4% - 9.1%**	**5.6%**	**66.3%**	**2.1%**	**21.0%**	**5.1%**	**27.2%**

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

DMEPOS (Policy Group)	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	
Pneumatic Compression Device	75.1%	61.9% - 88.4%	0.0%	61.3%	37.6%	0.0%	1.0%	0.1%
Lenses	66.5%	52.3% - 80.8%	2.0%	49.9%	19.9%	0.0%	28.1%	0.0%
Suction Pump	58.7%	44.8% - 72.5%	0.0%	45.9%	13.1%	0.0%	41.0%	0.0%
Tracheostomy Supplies	58.1%	39.1% - 77.1%	0.0%	93.4%	0.0%	0.0%	6.6%	0.1%
Lower Limb Orthoses	57.5%	49.9% - 65.2%	40.8%	45.8%	7.7%	0.1%	5.6%	0.6%
LSO	51.7%	43.3% - 60.0%	45.7%	38.9%	7.5%	0.0%	7.8%	0.2%
Diabetic Shoes	51.4%	40.2% - 62.7%	3.6%	69.1%	1.4%	0.0%	26.0%	0.1%
Oral Anti-Cancer Drugs	46.2%	31.7% - 60.7%	13.4%	75.0%	0.0%	0.0%	11.5%	0.0%
Patient Lift	44.5%	16.7% - 72.3%	0.0%	73.6%	0.0%	0.0%	26.4%	0.0%
Upper Limb Orthoses	42.2%	31.9% - 52.6%	44.5%	45.5%	2.5%	0.0%	7.6%	0.2%
Surgical Dressings	41.8%	34.2% - 49.4%	8.8%	70.6%	2.8%	3.7%	14.2%	0.4%
Wheelchairs Manual	40.6%	29.3% - 51.9%	0.0%	87.0%	0.0%	0.0%	13.0%	0.1%
Negative Pressure Wound Therapy	39.1%	21.9% - 56.3%	0.0%	59.9%	19.5%	0.0%	20.5%	0.1%
Enteral Nutrition	35.8%	25.3% - 46.3%	0.1%	43.8%	31.4%	3.1%	21.7%	0.2%
Breast Prostheses	34.4%	12.7% - 56.1%	0.0%	67.6%	2.0%	0.0%	30.4%	0.0%
Parenteral Nutrition	33.5%	25.9% - 41.2%	0.0%	72.7%	10.8%	0.0%	16.5%	0.2%
All Policy Groups with Less than 30 Claims	31.2%	13.8% - 48.7%	18.2%	75.2%	2.5%	0.1%	4.0%	0.7%
Walkers	30.7%	16.3% - 45.2%	0.4%	72.2%	7.5%	0.0%	19.9%	0.0%
Lower Limb Prostheses	25.1%	17.3% - 32.8%	0.0%	80.5%	0.0%	0.0%	19.5%	0.3%
Urological Supplies	24.9%	17.3% - 32.5%	0.0%	64.4%	1.5%	9.0%	25.2%	0.3%
Overall (incl. Service Types Not Listed)	**25.2%**	**23.2% - 27.3%**	**11.2%**	**66.2%**	**6.8%**	**0.8%**	**15.1%**	**6.8%**

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	
Clinic CORF	47.4%	23.2% - 71.6%	0.0%	89.7%	0.0%	0.0%	10.3%	0.0%
All Codes With Less Than 30 Claims	23.3%	(25.3%) - 71.9%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Hospital Other Part B	16.1%	8.6% - 23.6%	0.0%	87.2%	7.4%	5.4%	0.0%	0.3%
SNF Inpatient	15.8%	12.9% - 18.7%	3.5%	73.2%	0.0%	0.3%	23.0%	17.3%
Hospital based hospice	14.9%	8.2% - 21.6%	0.0%	74.9%	19.9%	1.1%	4.1%	0.8%
Hospital Inpatient (Part A)	13.3%	10.2% - 16.3%	0.2%	30.3%	69.4%	0.0%	0.0%	4.4%
SNF Outpatient	12.9%	1.9% - 24.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.2%
Nonhospital based hospice	11.8%	8.8% - 14.8%	1.3%	49.7%	41.0%	1.3%	6.8%	8.2%
Clinic OPT	10.9%	0.3% - 21.6%	0.0%	78.9%	0.0%	0.0%	21.1%	0.3%
Home Health	10.1%	7.9% - 12.3%	4.0%	34.9%	42.3%	3.0%	15.8%	5.5%
CAH	8.1%	2.0% - 14.1%	0.0%	93.9%	0.1%	2.1%	3.9%	1.6%
SNF Inpatient Part B	7.0%	(1.8%) - 15.7%	14.5%	84.8%	0.0%	0.0%	0.6%	0.6%
Hospital Inpatient Part B	5.7%	(1.7%) - 13.0%	59.7%	39.8%	0.0%	0.5%	0.0%	0.1%
Hospital Outpatient	5.4%	3.4% - 7.3%	0.5%	91.0%	1.5%	6.9%	0.1%	13.3%
FQHC	3.4%	(0.7%) - 7.5%	19.0%	81.0%	0.0%	0.0%	0.0%	0.1%
Clinical Rural Health	2.8%	0.5% - 5.1%	14.6%	53.4%	0.0%	32.0%	0.0%	0.1%
Clinic ESRD	1.2%	0.2% - 2.2%	20.6%	65.8%	0.0%	0.0%	13.6%	0.5%
Overall (incl. Service Types Not Listed)	**8.9%**	**7.8% - 10.0%**	**2.5%**	**67.4%**	**17.1%**	**2.5%**	**10.6%**	**53.2%**

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	
Female Reproductive System Reconstructive Procedures (748)	29.2%	18.8% - 39.6%	2.1%	9.0%	87.6%	1.3%	0.0%	0.0%
Percutaneous Intracardiac Procedures (273, 274)	28.5%	20.4% - 36.6%	0.0%	90.0%	10.0%	0.0%	0.0%	0.9%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	22.2%	18.2% - 26.3%	0.9%	12.7%	83.5%	3.0%	0.0%	1.7%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	20.9%	13.8% - 28.0%	0.0%	90.7%	6.6%	1.0%	1.6%	0.2%
Bilateral Or Multiple Major Joint Procs Of Lower Extremity (461, 462)	18.1%	10.2% - 26.1%	0.0%	31.5%	68.0%	0.5%	0.0%	0.0%
Syncope & Collapse (312)	16.0%	(0.2%) - 32.1%	0.0%	10.7%	89.3%	0.0%	0.0%	0.2%
Chest Pain (313)	15.3%	3.8% - 26.7%	0.0%	0.0%	100.0%	0.0%	0.0%	0.1%
Cervical Spinal Fusion (471, 472, 473)	15.0%	7.2% - 22.8%	2.8%	9.9%	87.3%	0.0%	0.0%	0.2%
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	13.8%	(10.7%) - 38.3%	0.0%	0.0%	0.0%	100.0%	0.0%	0.6%
Uterine & Adnexa Proc For Non-Malignancy (742, 743)	13.2%	2.7% - 23.6%	0.0%	5.6%	94.4%	0.0%	0.0%	0.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	12.1%	9.2% - 15.0%	0.0%	88.8%	7.6%	2.3%	1.4%	1.0%
AICD Generator Procedures (245)	11.2%	3.6% - 18.8%	5.9%	32.7%	9.2%	52.2%	0.0%	0.0%
Transient Ischemia W/O Thrombolytic (069)	10.6%	1.3% - 19.9%	0.0%	0.0%	90.4%	9.6%	0.0%	0.1%
Bone Diseases & Arthropathies (553, 554)	9.1%	(0.7%) - 18.8%	0.0%	0.0%	66.7%	33.3%	0.0%	0.0%
Organic Disturbances & Intellectual Disability (884)	8.8%	(0.6%) - 18.3%	0.0%	0.0%	43.5%	56.5%	0.0%	0.1%
Psychoses (885)	8.8%	(1.1%) - 18.8%	0.0%	89.3%	0.0%	10.7%	0.0%	0.8%
Medical Back Problems (551, 552)	8.5%	1.4% - 15.7%	0.0%	0.0%	100.0%	0.0%	0.0%	0.1%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	8.4%	4.7% - 12.1%	2.2%	19.3%	70.3%	8.3%	0.0%	0.0%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	7.6%	(0.1%) - 15.2%	0.0%	8.5%	31.2%	60.3%	0.0%	0.1%
Dysequilibrium (149)	7.4%	0.7% - 14.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%
Overall (incl. Service Types Not Listed)	**3.6%**	**3.0% - 4.2%**	**1.1%**	**29.5%**	**44.4%**	**24.6%**	**0.4%**	**12.8%**

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

This series of tables are 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 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
SNF Inpatient	$195,534,975	0.6%	0.1% - 1.0%	0.6%
Lower Limb Orthoses	$76,619,406	23.5%	17.9% - 29.0%	0.2%
Office visits - established	$74,679,617	0.5%	(0.1%) - 1.1%	0.2%
Home Health	$70,904,015	0.4%	(0.0%) - 0.8%	0.2%
Anesthesia	$54,548,637	4.8%	(1.8%) - 11.4%	0.2%
Ambulance	$50,547,248	1.2%	(0.3%) - 2.8%	0.2%
Lab tests - other (non-Medicare fee schedule)	$44,747,765	1.0%	0.3% - 1.7%	0.1%
All Policy Groups with Less than 30 Claims	$38,644,631	5.7%	1.5% - 9.9%	0.1%
LSO	$35,758,644	23.6%	16.7% - 30.5%	0.1%
Nonhospital based hospice	$34,204,870	0.2%	(0.1%) - 0.5%	0.1%
Clinic ESRD	$29,978,582	0.3%	(0.2%) - 0.7%	0.1%
SNF Inpatient Part B	$29,579,997	1.0%	(1.0%) - 3.0%	0.1%
Hospital visit - initial	$27,158,093	1.1%	0.3% - 1.9%	0.1%
Hospital Inpatient Part B	$24,586,494	3.4%	(3.4%) - 10.2%	0.1%
Intravenous Immune Globulin	$24,404,645	14.6%	(9.7%) - 39.0%	0.1%
Hospital visit - subsequent	$24,128,469	0.5%	(0.0%) - 1.0%	0.1%
Upper Limb Orthoses	$23,146,213	18.8%	11.9% - 25.6%	0.1%
Specialist - other	$19,766,357	0.8%	0.1% - 1.4%	0.1%
Hospital Outpatient	$19,580,279	0.0%	(0.0%) - 0.1%	0.1%
Ambulatory procedures - other	$17,905,974	1.7%	0.3% - 3.1%	0.1%
Overall (Incl. Codes Not Listed)	**$1,199,150,858**	**0.3%**	**0.2% - 0.4%**	**3.7%**

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
SNF Inpatient	$4,068,047,794	11.6%	9.1% - 14.0%	12.6%
Hospital Outpatient	$3,888,129,297	4.9%	3.0% - 6.8%	12.1%
Nonhospital based hospice	$1,303,249,555	5.9%	3.5% - 8.2%	4.0%
Lab tests - other (non-Medicare fee schedule)	$1,081,269,613	24.1%	19.8% - 28.5%	3.4%
Home Health	$617,658,415	3.5%	2.1% - 4.9%	1.9%
Specialist - other	$503,773,822	19.8%	13.7% - 25.9%	1.6%
Minor procedures - other (Medicare fee schedule)	$499,978,911	11.2%	8.8% - 13.7%	1.6%
CAH	$472,086,429	7.6%	1.6% - 13.5%	1.5%
Hospital Inpatient (Part A)	$426,943,734	4.0%	2.0% - 6.0%	1.3%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$277,901,541	10.8%	7.9% - 13.6%	0.9%
Percutaneous Intracardiac Procedures (273, 274)	$250,982,155	25.6%	17.9% - 33.4%	0.8%
Psychoses (885)	$224,426,780	7.9%	(1.9%) - 17.7%	0.7%
Ambulatory procedures - other	$221,140,992	20.9%	9.1% - 32.7%	0.7%
CPAP	$216,074,979	21.1%	16.6% - 25.5%	0.7%
Hospital visit - subsequent	$207,120,185	4.2%	2.5% - 5.8%	0.6%
Office visits - established	$206,552,801	1.4%	0.6% - 2.2%	0.6%
Hospital based hospice	$200,031,673	11.2%	5.4% - 16.9%	0.6%
Ambulance	$173,888,122	4.3%	0.6% - 8.0%	0.5%
SNF Inpatient Part B	$172,633,587	5.9%	(2.7%) - 14.5%	0.5%
Hospital visit - initial	$172,123,529	6.9%	4.4% - 9.5%	0.5%
Overall (Incl. Codes Not Listed)	**$20,002,069,849**	**4.7%**	**4.2% - 5.2%**	**62.1%**

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
Nonhospital based hospice	$1,075,124,004	4.8%	3.0% - 6.7%	3.3%
Hospital Inpatient (Part A)	$977,150,444	9.2%	6.8% - 11.6%	3.0%
Home Health	$748,210,155	4.3%	2.9% - 5.6%	2.3%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	$469,612,172	18.6%	14.7% - 22.4%	1.5%
Ambulance	$122,145,401	3.0%	0.5% - 5.5%	0.4%
Respiratory Infections & Inflammations (177, 178, 179)	$84,040,135	1.1%	(0.6%) - 2.9%	0.3%
Other Vascular Procedures (252, 253, 254)	$67,919,657	6.0%	0.0% - 12.0%	0.2%
Hospital Outpatient	$65,663,105	0.1%	(0.0%) - 0.2%	0.2%
Syncope & Collapse (312)	$59,620,019	14.3%	(1.8%) - 30.4%	0.2%
Cervical Spinal Fusion (471, 472, 473)	$57,375,712	13.1%	5.5% - 20.7%	0.2%
Hospital based hospice	$53,106,686	3.0%	(0.4%) - 6.4%	0.2%
Spinal Fusion Except Cervical (459, 460)	$44,723,742	3.1%	0.1% - 6.2%	0.1%
Minor procedures - other (Medicare fee schedule)	$39,395,684	0.9%	0.1% - 1.7%	0.1%
Medical Back Problems (551, 552)	$32,381,024	8.5%	1.4% - 15.7%	0.1%
Heart Failure & Shock (291, 292, 293)	$29,302,241	0.8%	(0.6%) - 2.2%	0.1%
Percutaneous Intracardiac Procedures (273, 274)	$27,899,521	2.9%	0.1% - 5.6%	0.1%
Esophagitis, Gastroent & Misc Digest Disorders (391, 392)	$25,476,757	3.3%	(0.9%) - 7.5%	0.1%
Degenerative Nervous System Disorders (056, 057)	$24,751,473	3.7%	0.8% - 6.5%	0.1%
Chest Pain (313)	$24,095,337	15.3%	3.8% - 26.7%	0.1%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$23,780,680	0.9%	0.1% - 1.7%	0.1%
Overall (Incl. Codes Not Listed)	**$5,085,502,885**	**1.2%**	**1.0% - 1.4%**	**15.8%**

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	$445,505,376	3.1%	2.3% - 3.8%	1.4%
Hospital visit - initial	$303,999,628	12.3%	10.3% - 14.2%	0.9%
Hospital Outpatient	$294,967,001	0.4%	0.0% - 0.7%	0.9%
Hospital visit - subsequent	$214,787,036	4.3%	3.3% - 5.3%	0.7%
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	$205,027,392	13.8%	(10.7%) - 38.3%	0.6%
Nursing home visit	$170,019,306	8.8%	3.6% - 14.0%	0.5%
Office visits - new	$169,881,912	6.2%	4.9% - 7.5%	0.5%
Emergency room visit	$152,771,565	8.8%	6.0% - 11.7%	0.5%
Hospital visit - critical care	$130,372,194	11.8%	8.4% - 15.2%	0.4%
Respiratory Infections & Inflammations (177, 178, 179)	$78,698,069	1.0%	(0.1%) - 2.2%	0.2%
Home Health	$53,110,293	0.3%	0.0% - 0.6%	0.2%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$34,989,358	0.4%	(0.2%) - 0.9%	0.1%
Spinal Fusion Except Cervical (459, 460)	$34,887,296	2.5%	(1.6%) - 6.5%	0.1%
Nonhospital based hospice	$34,329,039	0.2%	(0.1%) - 0.4%	0.1%
Organic Disturbances & Intellectual Disability (884)	$27,238,754	5.0%	(3.0%) - 13.0%	0.1%
Psychoses (885)	$26,894,551	0.9%	(0.9%) - 2.8%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	$21,526,581	2.1%	(0.2%) - 4.3%	0.1%
Specialist - other	$18,580,401	0.7%	0.2% - 1.3%	0.1%
SNF Inpatient	$17,768,463	0.1%	0.0% - 0.1%	0.1%
Other Circulatory System Diagnoses (314, 315, 316)	$16,758,025	2.1%	(1.5%) - 5.7%	0.1%
Overall (Incl. Codes Not Listed)	**$3,300,658,889**	**0.8%**	**0.6% - 0.9%**	**10.3%**

Table F5: Top 20 Types of Services with Downcoding[17] Errors

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Hospital Outpatient	$210,121,820	0.3%	(0.1%) - 0.6%	0.7%
Office visits - established	$47,660,964	0.3%	0.1% - 0.6%	0.1%
Respiratory Infections & Inflammations (177, 178, 179)	$34,947,424	0.5%	(0.4%) - 1.3%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$26,148,056	0.3%	(0.3%) - 0.8%	0.1%
Home Health	$26,109,328	0.1%	0.0% - 0.3%	0.1%
Cellulitis (602, 603)	$16,082,528	3.6%	(2.3%) - 9.6%	0.0%
Emergency room visit	$14,609,647	0.8%	(0.5%) - 2.2%	0.0%
Minor procedures - skin	$13,835,288	1.3%	(0.5%) - 3.1%	0.0%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	$12,595,441	0.5%	(0.4%) - 1.4%	0.0%
Other drugs	$10,889,514	0.1%	(0.0%) - 0.2%	0.0%
Simple Pneumonia & Pleurisy (193, 194, 195)	$8,767,566	0.8%	(0.3%) - 2.0%	0.0%
Minor procedures - other (Medicare fee schedule)	$7,516,761	0.2%	0.0% - 0.3%	0.0%
Heart Failure & Shock (291, 292, 293)	$6,377,670	0.2%	(0.1%) - 0.5%	0.0%
Spinal Fusion Except Cervical (459, 460)	$5,634,293	0.4%	(0.4%) - 1.2%	0.0%
Specialist - other	$5,185,944	0.2%	(0.0%) - 0.4%	0.0%
Renal Failure (682, 683, 684)	$5,163,757	0.3%	(0.3%) - 0.9%	0.0%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (004)	$4,927,722	0.4%	(0.2%) - 0.9%	0.0%
Standard imaging - other	$4,921,380	1.8%	(1.7%) - 5.2%	0.0%
Hospital Other Part B	$4,921,330	0.8%	(0.6%) - 2.3%	0.0%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$4,563,589	0.2%	(0.1%) - 0.6%	0.0%
Overall (Incl. Codes Not Listed)	**$753,414,383**	**0.2%**	**0.1% - 0.3%**	**2.3%**

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

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
SNF Inpatient	$1,276,860,344	3.6%	2.0% - 5.3%	4.0%
Home Health	$280,378,601	1.6%	0.5% - 2.7%	0.9%
Nonhospital based hospice	$177,521,875	0.8%	0.1% - 1.5%	0.6%
Specialist - other	$81,439,212	3.2%	(1.1%) - 7.5%	0.3%
Hospital visit - subsequent	$67,235,841	1.3%	(0.3%) - 3.0%	0.2%
Lab tests - other (non-Medicare fee schedule)	$58,155,121	1.3%	(0.4%) - 3.0%	0.2%
Office visits - new	$40,880,886	1.5%	0.2% - 2.7%	0.1%
Oxygen Supplies/Equipment	$30,849,253	5.1%	2.5% - 7.7%	0.1%
Emergency room visit	$30,693,014	1.8%	(1.7%) - 5.2%	0.1%
CPAP	$28,810,777	2.8%	1.0% - 4.7%	0.1%
Office visits - established	$27,516,370	0.2%	(0.1%) - 0.5%	0.1%
Ventilators	$24,724,147	4.6%	2.4% - 6.8%	0.1%
Minor procedures - other (Medicare fee schedule)	$22,354,957	0.5%	0.2% - 0.9%	0.1%
Urological Supplies	$21,935,866	6.3%	0.8% - 11.7%	0.1%
Immunosuppressive Drugs	$20,113,332	7.6%	(2.0%) - 17.1%	0.1%
Infusion Pumps & Related Drugs	$19,862,614	3.1%	0.3% - 5.9%	0.1%
Clinic ESRD	$19,727,864	0.2%	(0.1%) - 0.5%	0.1%
CAH	$19,660,792	0.3%	(0.3%) - 0.9%	0.1%
Lower Limb Prostheses	$18,768,639	4.9%	1.5% - 8.3%	0.1%
Clinic OPT	$18,271,535	2.3%	(2.3%) - 6.9%	0.1%
Overall (Incl. Codes Not Listed)	**$2,600,281,955**	**0.6%**	**0.5% - 0.8%**	**8.1%**

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
Lab tests - other (non-Medicare fee schedule)	1,911	$1,185,426,655	26.4%	21.8% - 31.1%	3.7%
Office visits - established	1,105	$755,705,932	5.2%	4.0% - 6.4%	2.3%
Specialist - other	1,186	$623,559,793	24.5%	17.6% - 31.4%	1.9%
Minor procedures - other (Medicare fee schedule)	1,694	$580,266,233	13.1%	10.4% - 15.7%	1.8%
Hospital visit - initial	644	$517,687,780	20.9%	17.8% - 24.0%	1.6%
Hospital visit - subsequent	806	$513,271,531	10.3%	7.6% - 12.9%	1.6%
All Codes With Less Than 30 Claims	1,228	$464,234,943	2.6%	1.1% - 4.0%	1.4%
Ambulance	315	$356,181,558	8.8%	4.2% - 13.3%	1.1%
Office visits - new	518	$269,421,546	9.8%	6.9% - 12.7%	0.8%
Nursing home visit	535	$251,050,202	13.0%	6.7% - 19.3%	0.8%
Ambulatory procedures - other	488	$243,463,409	23.0%	10.4% - 35.6%	0.8%
Emergency room visit	184	$233,323,950	13.5%	8.8% - 18.2%	0.7%
Other drugs	1,355	$198,897,627	1.6%	0.8% - 2.5%	0.6%
Specialist - psychiatry	531	$184,714,148	13.6%	7.2% - 20.0%	0.6%
Hospital visit - critical care	328	$176,379,408	16.0%	12.2% - 19.8%	0.5%
Major procedure - Other	470	$173,391,673	10.1%	(1.6%) - 21.8%	0.5%
Advanced imaging - CAT/CT/CTA: other	165	$170,411,163	13.4%	2.8% - 24.1%	0.5%
Chiropractic	346	$161,340,225	31.3%	24.3% - 38.3%	0.5%
Other tests - other	969	$156,512,209	11.6%	6.0% - 17.2%	0.5%
Standard imaging - nuclear medicine	258	$147,047,958	9.1%	6.4% - 11.8%	0.5%
Eye procedure - cataract removal/lens insertion	212	$146,067,233	8.3%	3.8% - 12.8%	0.5%
Ambulatory procedures - skin	289	$135,712,957	4.0%	(1.5%) - 9.5%	0.4%
Dialysis services (Medicare Fee Schedule)	102	$103,806,385	17.0%	8.5% - 25.6%	0.3%
Anesthesia	254	$97,140,501	8.6%	0.5% - 16.7%	0.3%
Minor procedures - musculoskeletal	186	$88,794,086	11.1%	2.0% - 20.2%	0.3%
Lab tests - other (Medicare fee schedule)	143	$74,075,355	5.9%	0.4% - 11.5%	0.2%
Oncology - radiation therapy	102	$67,432,527	8.8%	3.6% - 14.0%	0.2%
Minor procedures - skin	204	$62,511,543	5.7%	2.7% - 8.7%	0.2%
Standard imaging - musculoskeletal	179	$62,450,566	16.1%	7.0% - 25.3%	0.2%
Echography/ultrasonography - other	286	$60,771,065	10.1%	(0.3%) - 20.6%	0.2%
Standard imaging - other	116	$60,204,736	21.7%	11.7% - 31.6%	0.2%
Echography/ultrasonography - heart	193	$57,750,956	7.0%	2.8% - 11.2%	0.2%

Part B Services (BETOS Codes)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Other - Medicare fee schedule	253	$39,539,219	18.7%	5.7% - 31.6%	0.1%
Other tests - electrocardiograms	271	$39,490,772	17.2%	10.6% - 23.8%	0.1%
Echography/ultrasonography - carotid arteries	88	$36,419,294	21.1%	9.4% - 32.7%	0.1%
Standard imaging - chest	233	$30,518,833	14.1%	8.7% - 19.6%	0.1%
Advanced imaging - CAT/CT/CTA: brain/head/neck	92	$25,004,320	8.6%	2.3% - 14.8%	0.1%
Lab tests - automated general profiles	285	$23,467,707	8.6%	4.2% - 13.1%	0.1%
Major procedure, orthopedic - Knee replacement	84	$21,287,149	5.1%	(0.1%) - 10.2%	0.1%
Other - non-Medicare fee schedule	117	$20,570,463	42.5%	22.9% - 62.0%	0.1%
Lab tests - blood counts	310	$19,807,618	11.3%	6.4% - 16.3%	0.1%
Specialist - ophthalmology	274	$19,617,602	1.1%	(0.2%) - 2.5%	0.1%
Undefined codes	569	$18,582,000	12.2%	3.0% - 21.3%	0.1%
Lab tests - bacterial cultures	44	$17,707,693	26.2%	5.8% - 46.6%	0.1%
Endoscopy - colonoscopy	97	$14,693,793	2.0%	(0.8%) - 4.8%	0.0%
Lab tests - routine venipuncture (non-Medicare fee schedule	494	$12,273,077	12.4%	8.0% - 16.8%	0.0%
Imaging/procedure - other	246	$12,178,720	4.7%	(1.8%) - 11.3%	0.0%
Standard imaging - breast	39	$10,367,667	2.1%	(2.0%) - 6.2%	0.0%
Immunizations/Vaccinations	486	$3,641,765	0.1%	(0.1%) - 0.3%	0.0%
Eye procedure - other	347	$3,505,371	0.4%	(0.0%) - 0.8%	0.0%
Lab tests - urinalysis	127	$3,054,266	10.8%	4.2% - 17.3%	0.0%
Other tests - cardiovascular stress tests	144	$2,424,157	3.9%	(0.1%) - 7.9%	0.0%
All Type of Services (Incl. Codes Not Listed)	**14,072**	**$8,753,157,339**	**8.2%**	**7.4% - 9.1%**	**27.2%**

Table G2: Improper Payment Rates by Service Type: DMEPOS

DMEPOS (Policy Group)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
CPAP	928	$247,038,822	24.1%	19.4% - 28.8%	0.8%
All Policy Groups with Less than 30 Claims	730	$211,837,910	31.2%	13.8% - 48.7%	0.7%
Lower Limb Orthoses	676	$187,849,948	57.5%	49.9% - 65.2%	0.6%
Infusion Pumps & Related Drugs	463	$118,403,383	18.3%	12.1% - 24.6%	0.4%
Surgical Dressings	428	$116,939,403	41.8%	34.2% - 49.4%	0.4%
Ventilators	362	$108,208,116	20.1%	15.5% - 24.7%	0.3%
Glucose Monitor	828	$105,882,839	18.5%	13.9% - 23.0%	0.3%
Lower Limb Prostheses	344	$96,418,604	25.1%	17.3% - 32.8%	0.3%
Oxygen Supplies/Equipment	525	$92,948,439	15.3%	10.8% - 19.8%	0.3%
Urological Supplies	352	$87,135,118	24.9%	17.3% - 32.5%	0.3%
LSO	296	$78,264,550	51.7%	43.3% - 60.0%	0.2%
Nebulizers & Related Drugs	1,028	$77,952,039	10.9%	7.5% - 14.4%	0.2%
Parenteral Nutrition	320	$70,411,426	33.5%	25.9% - 41.2%	0.2%
Immunosuppressive Drugs	361	$63,087,097	23.7%	13.8% - 33.6%	0.2%
Enteral Nutrition	217	$56,798,059	35.8%	25.3% - 46.3%	0.2%
Wheelchairs Options/Accessories	325	$54,476,806	14.5%	4.2% - 24.9%	0.2%
Ostomy Supplies	250	$53,802,322	22.4%	14.5% - 30.3%	0.2%
Upper Limb Orthoses	252	$52,067,120	42.2%	31.9% - 52.6%	0.2%
Diabetic Shoes	202	$46,529,682	51.4%	40.2% - 62.7%	0.1%
Pneumatic Compression Device	95	$39,839,415	75.1%	61.9% - 88.4%	0.1%
Intravenous Immune Globulin	113	$39,644,001	23.8%	0.0% - 47.5%	0.1%
Wheelchairs Manual	245	$34,018,030	40.6%	29.3% - 51.9%	0.1%
Negative Pressure Wound Therapy	91	$31,872,954	39.1%	21.9% - 56.3%	0.1%
Tracheostomy Supplies	69	$17,726,914	58.1%	39.1% - 77.1%	0.1%
Lenses	59	$14,867,938	66.5%	52.3% - 80.8%	0.0%
Hospital Beds/Accessories	124	$14,516,004	22.7%	12.3% - 33.1%	0.0%
Automatic External Defibrillator	44	$13,834,662	9.2%	1.1% - 17.4%	0.0%
Walkers	89	$9,460,292	30.7%	16.3% - 45.2%	0.0%
Suction Pump	121	$9,324,027	58.7%	44.8% - 72.5%	0.0%
Oral Anti-Cancer Drugs	54	$8,382,137	46.2%	31.7% - 60.7%	0.0%
Respiratory Assist Device	91	$7,813,911	9.3%	1.9% - 16.7%	0.0%
Breast Prostheses	30	$6,779,653	34.4%	12.7% - 56.1%	0.0%
Wheelchairs Seating	157	$6,579,166	14.8%	3.3% - 26.3%	0.0%
Patient Lift	45	$4,076,770	44.5%	16.7% - 72.3%	0.0%
HFCWO Device	45	$3,596,284	6.3%	(0.8%) - 13.4%	0.0%
Other Neuromuscular Stimulators	51	$1,733,063	19.6%	7.7% - 31.5%	0.0%
All Type of Services (Incl. Codes Not Listed)	**9,398**	**$2,190,116,903**	**25.2%**	**23.2% - 27.3%**	**6.8%**

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
SNF Inpatient	1,266	$5,558,211,576	15.8%	12.9% - 18.7%	17.3%
Hospital Outpatient	1,899	$4,271,539,517	5.4%	3.4% - 7.3%	13.3%
Nonhospital based hospice	620	$2,624,429,343	11.8%	8.8% - 14.8%	8.2%
Home Health	999	$1,770,261,480	10.1%	7.9% - 12.3%	5.5%
Hospital Inpatient (Part A)	796	$1,407,046,587	13.3%	10.2% - 16.3%	4.4%
CAH	224	$502,761,424	8.1%	2.0% - 14.1%	1.6%
Hospital based hospice	124	$267,026,772	14.9%	8.2% - 21.6%	0.8%
SNF Inpatient Part B	76	$203,527,234	7.0%	(1.8%) - 15.7%	0.6%
Clinic ESRD	526	$145,529,438	1.2%	0.2% - 2.2%	0.5%
Hospital Other Part B	81	$94,865,861	16.1%	8.6% - 23.6%	0.3%
Clinic OPT	52	$86,430,957	10.9%	0.3% - 21.6%	0.3%
SNF Outpatient	44	$50,007,199	12.9%	1.9% - 24.0%	0.2%
Clinical Rural Health	207	$45,830,474	2.8%	0.5% - 5.1%	0.1%
Hospital Inpatient Part B	47	$41,172,824	5.7%	(1.7%) - 13.0%	0.1%
FQHC	64	$37,497,951	3.4%	(0.7%) - 7.5%	0.1%
All Codes With Less Than 30 Claims	3	$12,079,976	23.3%	(25.3%) - 71.9%	0.0%
Clinic CORF	60	$10,896,394	47.4%	23.2% - 71.6%	0.0%
All Type of Services (Incl. Codes Not Listed)	**7,088**	**$17,129,115,006**	**8.9%**	**7.8% - 10.0%**	**53.2%**

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	1,955	$941,882,037	4.3%	2.7% - 6.0%	2.9%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	1,143	$562,559,038	22.2%	18.2% - 26.3%	1.7%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	494	$313,125,183	12.1%	9.2% - 15.0%	1.0%
Percutaneous Intracardiac Procedures (273, 274)	169	$278,881,676	28.5%	20.4% - 36.6%	0.9%
Psychoses (885)	96	$251,321,331	8.8%	(1.1%) - 18.8%	0.8%
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	39	$205,027,392	13.8%	(10.7%) - 38.3%	0.6%
Respiratory Infections & Inflammations (177, 178, 179)	162	$167,719,946	2.2%	0.1% - 4.3%	0.5%
Spinal Fusion Except Cervical (459, 460)	120	$99,393,081	7.0%	1.8% - 12.2%	0.3%
Other Vascular Procedures (252, 253, 254)	71	$67,919,657	6.0%	0.0% - 12.0%	0.2%
Syncope & Collapse (312)	55	$66,774,549	16.0%	(0.2%) - 32.1%	0.2%
Cervical Spinal Fusion (471, 472, 473)	181	$65,694,989	15.0%	7.2% - 22.8%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	131	$65,644,997	20.9%	13.8% - 28.0%	0.2%
Organic Disturbances & Intellectual Disability (884)	49	$48,211,318	8.8%	(0.6%) - 18.3%	0.1%
GI Hemorrhage (377, 378, 379)	147	$41,766,580	3.1%	(0.0%) - 6.2%	0.1%
Heart Failure & Shock (291, 292, 293)	167	$38,657,488	1.1%	(0.4%) - 2.6%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	192	$34,989,358	0.4%	(0.2%) - 0.9%	0.1%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (004)	54	$33,946,222	2.5%	(1.3%) - 6.3%	0.1%
Degenerative Nervous System Disorders (056, 057)	246	$33,894,367	5.0%	1.8% - 8.2%	0.1%
Medical Back Problems (551, 552)	64	$32,381,024	8.5%	1.4% - 15.7%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	164	$31,729,876	1.6%	(0.2%) - 3.4%	0.1%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	225	$31,613,087	1.9%	0.5% - 3.2%	0.1%
Esophagitis, Gastroent & Misc Digest Disorders (391, 392)	113	$30,039,913	3.9%	(0.4%) - 8.1%	0.1%
Cellulitis (602, 603)	64	$27,906,190	6.3%	0.1% - 12.4%	0.1%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	98	$27,179,450	2.0%	(1.3%) - 5.3%	0.1%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	195	$24,983,209	7.6%	(0.1%) - 15.2%	0.1%
Chest Pain (313)	49	$24,095,337	15.3%	3.8% - 26.7%	0.1%
Renal Failure (682, 683, 684)	132	$23,139,872	1.5%	(0.2%) - 3.2%	0.1%
Red Blood Cell Disorders (811, 812)	67	$23,088,512	4.4%	(0.8%) - 9.7%	0.1%
Kidney & Ureter Procedures For Non-Neoplasm (659, 660, 661)	32	$22,152,059	6.7%	(2.5%) - 15.8%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	137	$21,526,581	2.1%	(0.2%) - 4.3%	0.1%
Coronary Bypass W/O Cardiac Cath (235, 236)	151	$21,435,996	2.4%	0.1% - 4.8%	0.1%
Peripheral Vascular Disorders (299, 300, 301)	64	$20,368,964	6.6%	0.6% - 12.7%	0.1%
Major Joint/Limb Reattachment Procedure Of Upper Extremities (483)	75	$20,282,330	2.4%	(0.0%) - 4.9%	0.1%
Kidney & Urinary Tract Infections (689, 690)	105	$18,205,822	1.6%	(0.0%) - 3.2%	0.1%
Permanent Cardiac Pacemaker Implant (242, 243, 244)	40	$17,426,504	2.6%	(2.5%) - 7.7%	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
Other Circulatory System Diagnoses (314, 315, 316)	42	$16,758,025	2.1%	(1.5%) - 5.7%	0.1%
Transient Ischemia W/O Thrombolytic (069)	50	$16,510,654	10.6%	1.3% - 19.9%	0.1%
Percutaneous Cardiovascular Procedures W Drug-Eluting Stent (246)	71	$16,425,509	1.5%	(0.4%) - 3.4%	0.1%
Other Digestive System Diagnoses (393, 394, 395)	125	$16,345,347	3.6%	(0.6%) - 7.7%	0.1%
Major Small & Large Bowel Procedures (329, 330, 331)	119	$15,228,314	0.6%	(0.2%) - 1.5%	0.0%
Chronic Obstructive Pulmonary Disease (190, 191, 192)	113	$14,890,091	2.8%	(1.0%) - 6.6%	0.0%
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes (640, 641)	93	$14,481,017	2.2%	(0.5%) - 4.8%	0.0%
Alcohol/Drug Abuse Or Dependence W/O Rehabilitation Therapy (896, 897)	42	$14,480,689	5.0%	(3.6%) - 13.6%	0.0%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	104	$14,379,293	1.0%	(0.8%) - 2.8%	0.0%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	44	$14,262,284	0.5%	(0.5%) - 1.4%	0.0%
GI Obstruction (388, 389, 390)	60	$13,508,287	2.2%	(0.5%) - 4.9%	0.0%
Bilateral Or Multiple Major Joint Procs Of Lower Extremity (461, 462)	87	$12,927,771	18.1%	10.2% - 26.1%	0.0%
Revision Of Hip Or Knee Replacement (466, 467, 468)	81	$12,894,360	1.8%	(0.7%) - 4.3%	0.0%
Cranial & Peripheral Nerve Disorders (073, 074)	64	$11,138,905	5.2%	(0.3%) - 10.7%	0.0%
Fx, Sprn, Strn & Disl Except Femur, Hip, Pelvis & Thigh (562, 563)	61	$10,701,450	3.6%	(0.5%) - 7.8%	0.0%
Fractures Of Hip & Pelvis (535, 536)	32	$10,383,101	5.8%	(2.1%) - 13.6%	0.0%
Hypertension (304, 305)	38	$10,264,826	4.8%	(1.9%) - 11.5%	0.0%
Signs & Symptoms (947, 948)	122	$9,937,862	3.3%	(0.2%) - 6.7%	0.0%
Diabetes (637, 638, 639)	71	$8,870,823	1.6%	(1.4%) - 4.6%	0.0%
Other Kidney & Urinary Tract Procedures (673, 674, 675)	58	$8,720,252	1.6%	(0.6%) - 3.8%	0.0%
Circulatory Disorders Except AMI, W Card Cath (286, 287)	59	$8,713,533	1.4%	(0.6%) - 3.5%	0.0%
Other Kidney & Urinary Tract Diagnoses (698, 699, 700)	81	$8,121,810	0.9%	(0.4%) - 2.3%	0.0%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	378	$7,763,435	8.4%	4.7% - 12.1%	0.0%
Uterine & Adnexa Proc For Non-Malignancy (742, 743)	87	$7,374,142	13.2%	2.7% - 23.6%	0.0%
Bone Diseases & Arthropathies (553, 554)	50	$6,540,431	9.1%	(0.7%) - 18.8%	0.0%
Respiratory System Diagnosis W Ventilator Support <=96 Hours (208)	67	$6,479,860	0.7%	(0.6%) - 2.1%	0.0%
Major Chest Procedures (163, 164, 165)	89	$6,393,001	0.9%	(0.6%) - 2.4%	0.0%
Respiratory System Diagnosis W Ventilator Support >96 Hours (207)	48	$6,283,994	0.2%	(0.2%) - 0.6%	0.0%
Dysequilibrium (149)	57	$6,142,303	7.4%	0.7% - 14.0%	0.0%
Seizures (100, 101)	66	$5,860,362	1.4%	(1.0%) - 3.8%	0.0%
Other Major Cardiovascular Procedures (270, 271, 272)	124	$5,816,057	0.8%	0.0% - 1.6%	0.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath (219, 220, 221)	109	$5,624,824	0.4%	(0.1%) - 1.0%	0.0%
Pulmonary Embolism (175, 176)	50	$4,896,529	0.9%	(0.9%) - 2.7%	0.0%
AICD Generator Procedures (245)	85	$4,432,507	11.2%	3.6% - 18.8%	0.0%
Other Circulatory System OR Procedures (264)	103	$3,685,403	1.6%	(0.6%) - 3.8%	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
AMI, Discharged Alive (280, 281, 282)	139	$3,683,187	0.4%	(0.4%) - 1.2%	0.0%
Female Reproductive System Reconstructive Procedures (748)	105	$3,435,961	29.2%	18.8% - 39.6%	0.0%
Other Cardiothoracic Procedures (228, 229)	63	$2,856,526	1.2%	(0.3%) - 2.8%	0.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W Card Cath (216, 217, 218)	54	$2,808,714	0.6%	(0.5%) - 1.7%	0.0%
Poisoning & Toxic Effects Of Drugs (917, 918)	75	$2,699,109	1.4%	(1.3%) - 4.1%	0.0%
Aftercare (949, 950)	53	$2,531,649	5.5%	(0.5%) - 11.4%	0.0%
Hip Replacement With Principal Diagnosis Of Hip Fracture (521, 522)	48	$2,385,541	0.4%	(0.4%) - 1.2%	0.0%
ECMO Or Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (003)	65	$1,226,669	0.0%	(0.0%) - 0.1%	0.0%
Other Disorders Of Nervous System (091, 092, 093)	100	$878,933	0.2%	(0.2%) - 0.7%	0.0%
Nonspecific Cerebrovascular Disorders (070, 071, 072)	35	$369,065	0.1%	(0.1%) - 0.4%	0.0%
Heart Transplant Or Implant Of Heart Assist System (001, 002)	54	$196,094	0.1%	(0.0%) - 0.1%	0.0%
Cardiac Arrhythmia & Conduction Disorders (308, 309, 310)	146	$2,749	0.0%	(0.0%) - 0.0%	0.0%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	97	$0	0.0%	N/A	0.0%
Kidney Transplant (652)	51	$0	0.0%	N/A	0.0%
Major Gastrointestinal Disorders & Peritoneal Infections (371, 372, 373)	30	$0	0.0%	N/A	0.0%
Perc Cardiovasc Proc W Drug-Eluting Stent (247)	65	$0	0.0%	N/A	0.0%
Pulmonary Edema & Respiratory Failure (189)	84	$0	0.0%	N/A	0.0%
All Type of Services (Incl. Codes Not Listed)	**11,440**	**$4,115,275,186**	**3.6%**	**3.0% - 4.2%**	**12.8%**

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. Appendix H shows the referring providers or provider types for the top three service types for Part B and DMEPOS.

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	657	$373,490,095	22.7%	14.9% - 30.6%	31.5%
Family Practice	308	$249,809,624	29.5%	20.7% - 38.2%	21.1%
Nurse Practitioner	263	$184,939,488	34.7%	23.1% - 46.2%	15.6%
Physician Assistant	83	$38,972,541	19.0%	6.9% - 31.1%	3.3%
No Referring Provider Type	98	$38,604,323	19.0%	4.5% - 33.5%	3.3%
Anesthesiology	83	$20,148,230	32.7%	19.9% - 45.5%	1.7%
Physical Medicine and Rehabilitation	51	$17,223,611	36.1%	6.6% - 65.6%	1.5%
Cardiology	42	$12,376,710	16.7%	(3.4%) - 36.9%	1.0%
General Surgery	68	$12,057,159	9.7%	2.8% - 16.7%	1.0%
Interventional Pain Management	51	$4,128,381	11.3%	2.9% - 19.6%	0.3%
All Referring Providers	**1,911**	**$1,185,426,655**	**26.4%**	**21.8% - 31.1%**	**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	180	$139,121,238	6.5%	2.2% - 10.7%	18.4%
Family Practice	174	$130,785,704	5.3%	2.1% - 8.5%	17.3%
Nurse Practitioner	120	$93,038,652	7.3%	1.8% - 12.7%	12.3%
All Provider Types With Less Than 30 Claims	76	$80,080,686	8.2%	1.5% - 14.8%	10.6%
Cardiology	63	$46,317,071	4.3%	1.6% - 7.1%	6.1%
Neurology	31	$21,984,033	4.7%	0.6% - 8.9%	2.9%
Physician Assistant	41	$17,574,550	3.3%	(2.4%) - 8.9%	2.3%
Ophthalmology	45	$13,962,350	3.3%	(0.8%) - 7.3%	1.8%
Dermatology	33	$13,314,190	2.3%	(0.8%) - 5.4%	1.8%
All Provider Types	**1,105**	**$755,705,932**	**5.2%**	**4.0% - 6.4%**	**100.0%**

Table H3: Improper Payment Rates for Specialist - other by Provider Type

Specialist - other	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	274	$202,906,931	28.2%	18.1% - 38.3%	32.5%
Family Practice	225	$152,185,165	21.8%	7.9% - 35.7%	24.4%
All Provider Types With Less Than 30 Claims	47	$116,702,999	48.3%	15.7% - 81.0%	18.7%
Nurse Practitioner	98	$65,966,958	35.3%	9.4% - 61.2%	10.6%
Physical Therapist in Private Practice	115	$9,980,890	3.4%	(1.1%) - 7.9%	1.6%
Clinical Cardiatric Electrophysiology	72	$9,785,007	27.8%	8.5% - 47.0%	1.6%
Cardiology	88	$7,885,259	20.4%	2.6% - 38.1%	1.3%
IDTF	49	$7,845,544	18.6%	7.9% - 29.4%	1.3%
All Provider Types	**1,186**	**$623,559,793**	**24.5%**	**17.6% - 31.4%**	**100.0%**

Table H4: 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	454	$110,340,511	22.9%	16.3% - 29.5%	44.7%
Nurse Practitioner	142	$47,318,835	26.0%	13.2% - 38.7%	19.2%
Family Practice	138	$45,435,867	33.2%	18.9% - 47.5%	18.4%
Physician Assistant	59	$15,039,850	19.7%	4.0% - 35.3%	6.1%
Neurology	42	$9,186,801	15.3%	(0.6%) - 31.1%	3.7%
All Referring Providers	**928**	**$247,038,822**	**24.1%**	**19.4% - 28.8%**	**100.0%**

Table H5: Improper Payment Rates for Lower Limb Orthoses by Referring Provider

Lower Limb Orthoses	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Family Practice	117	$52,873,237	70.8%	54.3% - 87.3%	28.1%
General Surgery	257	$41,973,748	46.4%	33.7% - 59.1%	22.3%
Internal Medicine	82	$38,276,414	77.0%	57.0% - 97.0%	20.4%
Podiatry	73	$11,806,341	30.8%	4.4% - 57.2%	6.3%
Nurse Practitioner	35	$11,559,122	70.6%	47.0% - 94.2%	6.2%
All Referring Providers	**676**	**$187,849,948**	**57.5%**	**49.9% - 65.2%**	**100.0%**

Table H6: Improper Payment Rates for Infusion Pumps & Related Drugs by Referring Provider

Infusion Pumps & Related Drugs	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	190	$57,177,686	18.6%	9.4% - 27.8%	48.3%
Allergy/Immunology	63	$29,394,905	27.0%	8.3% - 45.6%	24.8%
No Referring Provider Type	50	$17,692,183	31.4%	2.7% - 60.1%	14.9%
Nurse Practitioner	56	$3,683,824	4.5%	(0.0%) - 9.0%	3.1%
Neurology	34	$1,152,936	3.4%	(3.2%) - 10.0%	1.0%
All Referring Providers	**463**	**$118,403,383**	**18.3%**	**12.1% - 24.6%**	**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 B

Providers Billing to Part B	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Clinical Laboratory (Billing Independently)	1,652	$1,116,677,795	27.5%	23.4% - 31.7%	3.5%
Internal Medicine	1,152	$1,108,074,078	15.6%	12.3% - 18.9%	3.4%
All Provider Types With Less Than 30 Claims	872	$579,324,441	8.8%	5.3% - 12.4%	1.8%
Family Practice	708	$574,991,236	11.6%	8.2% - 14.9%	1.8%
Physical Therapist in Private Practice	819	$449,523,759	15.8%	12.6% - 19.0%	1.4%
Cardiology	659	$359,870,563	7.7%	4.5% - 10.9%	1.1%
Ambulance Service Supplier (e.g., private ambulance companies)	315	$356,181,558	8.8%	4.2% - 13.3%	1.1%
Diagnostic Radiology	611	$353,239,009	10.2%	3.8% - 16.6%	1.1%
Nurse Practitioner	728	$315,890,611	6.1%	3.2% - 9.0%	1.0%
Ambulatory Surgical Center	246	$282,611,710	4.8%	0.6% - 9.0%	0.9%
Emergency Medicine	282	$251,995,039	13.0%	8.8% - 17.2%	0.8%
Podiatry	281	$238,289,619	14.9%	5.2% - 24.7%	0.7%
IDTF	261	$221,761,073	11.9%	3.9% - 19.9%	0.7%
Physician Assistant	308	$213,659,814	10.9%	4.5% - 17.3%	0.7%
Chiropractic	355	$161,340,225	31.3%	24.3% - 38.3%	0.5%
Nephrology	196	$161,292,724	13.5%	8.9% - 18.1%	0.5%
Hematology/Oncology	400	$146,117,894	1.8%	0.5% - 3.1%	0.5%
Orthopedic Surgery	167	$131,068,030	5.5%	2.1% - 8.9%	0.4%
Clinical Social Worker	104	$130,136,301	23.0%	9.9% - 36.1%	0.4%
Ophthalmology	600	$128,926,851	1.7%	1.0% - 2.5%	0.4%
Neurology	194	$119,937,585	5.4%	1.2% - 9.6%	0.4%
Urology	93	$109,916,633	6.7%	1.9% - 11.5%	0.3%
Pathology	120	$109,204,227	8.3%	0.1% - 16.6%	0.3%
Hospitalist	183	$98,761,332	10.5%	6.6% - 14.5%	0.3%
Pulmonary Disease	271	$97,013,262	6.8%	4.2% - 9.3%	0.3%
Anesthesiology	167	$88,669,702	9.8%	1.3% - 18.3%	0.3%
Radiation Oncology	111	$88,638,324	8.2%	3.2% - 13.2%	0.3%
Infectious Disease	74	$73,994,866	15.2%	4.0% - 26.4%	0.2%
General Surgery	116	$65,657,303	2.8%	0.4% - 5.3%	0.2%
Otolaryngology	64	$63,789,851	6.3%	0.7% - 12.0%	0.2%
Portable X-Ray Supplier (Billing Independently)	100	$62,878,220	23.5%	11.4% - 35.7%	0.2%
Psychiatry	103	$54,641,317	5.4%	2.2% - 8.5%	0.2%

Providers Billing to Part B	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Cardiac Electrophysiology	113	$51,303,699	7.7%	1.2% - 14.3%	0.2%
Occupational Therapist in Private Practice	86	$46,131,126	18.7%	7.9% - 29.6%	0.1%
Physical Medicine and Rehabilitation	176	$44,438,539	6.5%	3.5% - 9.6%	0.1%
Rheumatology	213	$42,254,417	2.6%	(0.4%) - 5.5%	0.1%
Clinical Psychologist	75	$41,918,475	6.0%	1.0% - 11.0%	0.1%
Gastroenterology	149	$40,999,263	3.7%	1.7% - 5.8%	0.1%
Endocrinology	40	$38,106,329	13.2%	1.7% - 24.6%	0.1%
Pain Management	139	$37,702,759	9.8%	4.0% - 15.5%	0.1%
Interventional Cardiology	127	$33,673,383	4.3%	1.3% - 7.4%	0.1%
Dermatology	130	$28,872,213	0.9%	0.0% - 1.8%	0.1%
Optometry	80	$20,763,391	2.8%	0.2% - 5.4%	0.1%
Medical Oncology	147	$12,918,794	0.4%	(0.1%) - 0.9%	0.0%
Centralized Flu	103	$0	0.0%	0.0% - 0.0%	0.0%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	183	$0	0.0%	0.0% - 0.0%	0.0%
Overall (Incl. Codes Not Listed)	**14,072**	**$8,753,157,339**	**8.2%**	**7.4% - 9.1%**	**27.2%**

Table I2: Improper Payment Rates and Amounts by Provider Type[18]: DMEPOS

Providers Billing to DMEPOS	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Medical supply company not included in 51, 52, or 53	4,331	$1,166,293,439	27.5%	24.4% - 30.6%	3.6%
Pharmacy	2,816	$523,894,448	20.5%	17.4% - 23.6%	1.6%
Medical Supply Company with Respiratory Therapist	852	$187,970,603	23.6%	19.5% - 27.7%	0.6%
All Provider Types With Less Than 30 Claims	277	$62,239,872	39.6%	29.1% - 50.1%	0.2%
Podiatry	175	$43,976,606	55.1%	41.7% - 68.6%	0.1%
Individual orthotic personnel certified by an accrediting organization	164	$40,462,711	29.2%	16.0% - 42.4%	0.1%
Individual prosthetic personnel certified by an accrediting organization	162	$35,094,759	25.5%	13.7% - 37.3%	0.1%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	106	$27,530,789	23.6%	8.5% - 38.7%	0.1%
Orthopedic Surgery	180	$27,247,416	35.3%	23.5% - 47.0%	0.1%
General Practice	94	$26,676,054	45.5%	27.0% - 63.9%	0.1%
Supplier of oxygen and/or oxygen related equipment	55	$17,274,869	28.5%	3.4% - 53.5%	0.1%
Medical supply company with orthotic personnel certified by an accrediting organization	110	$14,185,719	6.7%	(2.4%) - 15.8%	0.0%
Individual prosthetic/orthotic personnel certified by an accrediting organization	30	$12,056,796	36.5%	12.6% - 60.4%	0.0%
Multispecialty Clinic or Group Practice	46	$5,212,823	36.7%	10.8% - 62.7%	0.0%
Overall (Incl. Codes Not Listed)	**9,398**	**$2,190,116,903**	**25.2%**	**23.2% - 27.3%**	**6.8%**

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

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
SNF	1,386	$5,811,746,009	15.1%	12.3% - 17.8%	18.1%
OPPS, Laboratory, Ambulatory	2,028	$4,407,578,203	5.4%	3.5% - 7.3%	13.7%
Hospice	744	$2,891,456,114	12.0%	9.2% - 14.8%	9.0%
HHA	1,001	$1,782,341,456	10.2%	7.9% - 12.4%	5.5%
Inpatient Rehabilitation Hospitals	249	$689,535,418	19.3%	13.8% - 24.9%	2.1%
Inpatient Rehab Unit	221	$590,988,048	19.1%	12.1% - 26.1%	1.8%
CAH Outpatient Services	224	$502,761,424	8.1%	2.0% - 14.1%	1.6%
ESRD	526	$145,529,438	1.2%	0.2% - 2.2%	0.5%
ORF	52	$86,430,957	10.9%	0.3% - 21.6%	0.3%
Other MAC Service Types	9	$77,177,187	37.1%	(5.5%) - 79.7%	0.2%
Inpatient CAH	271	$49,345,934	1.9%	0.4% - 3.3%	0.2%
RHC	207	$45,830,474	2.8%	0.5% - 5.1%	0.1%
FQHC	64	$37,497,951	3.4%	(0.7%) - 7.5%	0.1%
CORF	60	$10,896,394	47.4%	23.2% - 71.6%	0.0%
All Codes With Less Than 30 Claims	5	$0	0.0%	0.0% - 0.0%	0.0%
Non PPS Short Term Hospital Inpatient	41	$0	0.0%	0.0% - 0.0%	0.0%
Overall (Incl. Codes Not Listed)	**7,088**	**$17,129,115,006**	**8.9%**	**7.8% - 10.0%**	**53.2%**

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	11,087	$3,765,267,264	3.5%	2.9% - 4.1%	11.7%
Other MAC Service Type	225	$274,754,896	8.4%	(0.3%) - 17.1%	0.9%
DRG Long Term	128	$75,253,026	3.4%	(2.3%) - 9.1%	0.2%
Overall (Incl. Codes Not Listed)	**11,440**	**$4,115,275,186**	**3.6%**	**3.0% - 4.2%**	**12.8%**

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	31.3%	355	2.3%	88.5%	4.1%	3.8%	1.2%
Clinical Laboratory (Billing Independently)	27.5%	1,652	4.0%	93.8%	0.1%	0.0%	2.1%
Portable X-Ray Supplier (Billing Independently)	23.5%	100	0.0%	96.4%	0.0%	0.1%	3.5%
Clinical Social Worker	23.0%	104	8.3%	85.9%	0.0%	2.8%	3.1%
Occupational Therapist in Private Practice	18.7%	86	0.0%	92.6%	0.0%	5.2%	2.2%
Physical Therapist in Private Practice	15.8%	819	0.0%	94.2%	0.0%	1.8%	4.1%
Internal Medicine	15.6%	1,152	7.8%	53.8%	0.0%	31.8%	6.5%
Infectious Disease	15.2%	74	0.0%	53.1%	0.0%	46.9%	0.0%
Podiatry	14.9%	281	0.0%	80.9%	0.5%	18.4%	0.2%
Nephrology	13.5%	196	0.0%	58.7%	0.0%	40.7%	0.5%
Endocrinology	13.2%	40	10.7%	46.0%	0.0%	26.0%	17.3%
Emergency Medicine	13.0%	282	4.0%	23.6%	0.0%	59.7%	12.8%
IDTF	11.9%	261	0.4%	96.6%	0.0%	0.0%	3.0%
Family Practice	11.6%	708	11.1%	47.2%	0.1%	26.2%	15.4%
Physician Assistant	10.9%	308	7.2%	58.0%	1.6%	18.3%	14.9%
Hospitalist	10.5%	183	8.3%	36.1%	0.0%	55.6%	0.0%
Diagnostic Radiology	10.2%	611	4.0%	93.9%	0.0%	1.0%	1.1%
Anesthesiology	9.8%	167	62.2%	19.7%	0.5%	11.3%	6.3%
Pain Management	9.8%	139	6.8%	75.8%	0.1%	8.6%	8.6%
All Provider Types With Less Than 30 Claims	8.8%	872	0.9%	73.0%	0.0%	20.5%	5.6%
Ambulance Service Supplier (e.g., private ambulance companies)	8.8%	315	14.2%	48.8%	34.3%	2.7%	0.0%
Pathology	8.3%	120	1.0%	64.2%	0.0%	0.0%	34.8%
Radiation Oncology	8.2%	111	9.2%	89.7%	0.0%	1.0%	0.0%
Cardiac Electrophysiology	7.7%	113	7.4%	78.8%	0.0%	13.8%	0.0%
Cardiology	7.7%	659	4.7%	51.4%	4.0%	35.3%	4.6%
Pulmonary Disease	6.8%	271	2.6%	16.7%	0.0%	80.5%	0.2%
Urology	6.7%	93	3.6%	76.5%	0.0%	20.0%	0.0%
Physical Medicine and Rehabilitation	6.5%	176	0.5%	41.3%	0.0%	51.6%	6.6%
Otolaryngology	6.3%	64	0.0%	49.3%	0.0%	50.7%	0.0%
Nurse Practitioner	6.1%	728	4.0%	42.6%	9.3%	39.1%	5.1%
Clinical Psychologist	6.0%	75	11.1%	74.5%	0.0%	0.0%	14.4%

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
Orthopedic Surgery	5.5%	167	12.8%	58.5%	0.0%	25.5%	3.2%
Neurology	5.4%	194	0.3%	51.8%	0.1%	47.8%	0.0%
Psychiatry	5.4%	103	0.1%	21.3%	2.7%	66.0%	10.0%
Ambulatory Surgical Center	4.8%	246	3.3%	90.6%	0.0%	5.6%	0.5%
Interventional Cardiology	4.3%	127	0.4%	78.3%	0.0%	21.3%	0.0%
Gastroenterology	3.7%	149	10.1%	32.0%	0.0%	57.9%	0.0%
General Surgery	2.8%	116	9.3%	37.9%	0.0%	52.8%	0.0%
Optometry	2.8%	80	0.0%	3.8%	0.0%	96.2%	0.0%
Rheumatology	2.6%	213	0.0%	18.5%	0.0%	81.5%	0.0%
Hematology/Oncology	1.8%	400	0.8%	60.9%	0.0%	31.9%	6.4%
Ophthalmology	1.7%	600	10.3%	68.3%	0.0%	21.4%	0.0%
Dermatology	0.9%	130	7.0%	16.6%	0.0%	43.6%	32.9%
Medical Oncology	0.4%	147	54.4%	7.9%	0.0%	37.7%	0.0%
Centralized Flu	0.0%	103	N/A	N/A	N/A	N/A	N/A
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	183	N/A	N/A	N/A	N/A	N/A
All Provider Types	**8.2%**	**14,072**	**5.6%**	**66.3%**	**2.1%**	**21.0%**	**5.1%**

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
Podiatry	55.1%	175	1.2%	63.8%	7.9%	0.1%	27.0%
General Practice	45.5%	94	5.5%	68.0%	7.2%	1.4%	18.0%
All Provider Types With Less Than 30 Claims	39.6%	277	0.5%	67.8%	9.4%	0.0%	22.3%
Multispecialty Clinic or Group Practice	36.7%	46	0.0%	65.8%	0.6%	0.0%	33.6%
Individual prosthetic/orthotic personnel certified by an accrediting organization	36.5%	30	0.0%	82.4%	0.0%	0.0%	17.6%
Orthopedic Surgery	35.3%	180	1.5%	45.6%	32.8%	0.0%	20.2%
Individual orthotic personnel certified by an accrediting organization	29.2%	164	0.1%	79.4%	1.2%	0.0%	19.4%
Supplier of oxygen and/or oxygen related equipment	28.5%	55	0.0%	91.0%	0.0%	0.0%	9.0%
Medical supply company not included in 51, 52, or 53	27.5%	4,331	16.4%	65.8%	5.8%	0.6%	11.4%
Individual prosthetic personnel certified by an accrediting organization	25.5%	162	0.0%	98.9%	0.2%	0.0%	0.9%
Medical Supply Company with Respiratory Therapist	23.6%	852	0.3%	75.8%	2.8%	2.1%	19.0%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	23.6%	106	0.0%	80.8%	7.4%	0.0%	11.8%
Pharmacy	20.5%	2,816	9.0%	59.3%	9.9%	1.2%	20.6%
Medical supply company with orthotic personnel certified by an accrediting organization	6.7%	110	20.9%	70.0%	6.5%	0.0%	2.5%
All Provider Types	**25.2%**	**9,398**	**11.2%**	**66.2%**	**6.8%**	**0.8%**	**15.1%**

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
CORF	47.4%	60	0.0%	89.7%	0.0%	0.0%	10.3%
Other MAC Service Types	37.1%	9	0.0%	85.8%	14.2%	0.0%	0.0%
Inpatient Rehabilitation Hospitals	19.3%	249	0.0%	14.3%	85.7%	0.0%	0.0%
Inpatient Rehab Unit	19.1%	221	0.5%	41.7%	57.8%	0.0%	0.0%
SNF	15.1%	1,386	3.9%	73.8%	0.0%	0.3%	22.0%
Hospice	12.0%	744	1.2%	52.0%	39.0%	1.3%	6.5%
ORF	10.9%	52	0.0%	78.9%	0.0%	0.0%	21.1%
HHA	10.2%	1,001	4.0%	35.3%	42.0%	3.0%	15.7%
CAH Outpatient Services	8.1%	224	0.0%	93.9%	0.1%	2.1%	3.9%
OPPS, Laboratory, Ambulatory	5.4%	2,028	1.0%	90.5%	1.6%	6.8%	0.1%
FQHC	3.4%	64	19.0%	81.0%	0.0%	0.0%	0.0%
RHC	2.8%	207	14.6%	53.4%	0.0%	32.0%	0.0%
Inpatient CAH	1.9%	271	0.0%	32.1%	67.9%	0.0%	0.0%
ESRD	1.2%	526	20.6%	65.8%	0.0%	0.0%	13.6%
All Codes With Less Than 30 Claims	0.0%	5	N/A	N/A	N/A	N/A	N/A
Non PPS Short Term Hospital Inpatient	0.0%	41	N/A	N/A	N/A	N/A	N/A
All Provider Types	**8.9%**	**7,088**	**2.5%**	**67.4%**	**17.1%**	**2.5%**	**10.6%**

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 MAC Service Types	8.4%	225	0.0%	90.0%	0.2%	9.8%	0.0%
DRG Short Term	3.5%	11,087	1.2%	25.7%	46.6%	26.2%	0.4%
DRG Long Term	3.4%	128	0.0%	0.0%	99.5%	0.5%	0.0%
All Provider Types	**3.6%**	**11,440**	**1.1%**	**29.5%**	**44.4%**	**24.6%**	**0.4%**

Appendix K: Coding Information

Table K1: E&M Service Types by Improper Payments

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	
All Codes With Less Than 30 Claims	$426,592,020	20.4%	13.2% - 27.5%	5.3%	78.5%	1.4%	7.1%	7.8%	1.3%
Office o/p est mod 30-39 min (99214)	$410,637,206	5.0%	3.2% - 6.7%	5.3%	33.0%	0.0%	61.6%	0.0%	1.3%
Initial hospital care (99223)	$363,764,648	24.3%	20.7% - 27.9%	5.1%	29.9%	0.0%	63.3%	1.7%	1.1%
Subsequent hospital care (99233)	$321,214,557	16.0%	12.8% - 19.1%	6.9%	28.5%	0.0%	61.6%	2.9%	1.0%
Emergency dept visit (99285)	$189,249,960	15.0%	9.0% - 20.9%	0.0%	20.0%	0.0%	63.8%	16.2%	0.6%
Critical care first hour (99291)	$173,900,311	16.2%	12.4% - 20.0%	6.7%	17.1%	0.0%	75.0%	1.2%	0.5%
Office o/p est hi 40-54 min (99215)	$163,789,892	13.8%	11.1% - 16.5%	5.0%	16.2%	0.0%	76.1%	2.7%	0.5%
Office o/p new mod 45-59 min (99204)	$116,057,343	8.7%	6.3% - 11.2%	6.5%	8.1%	0.0%	72.6%	12.8%	0.4%
Office o/p est low 20-29 min (99213)	$114,142,788	2.4%	0.5% - 4.4%	35.3%	4.4%	0.0%	40.8%	19.5%	0.4%
Chrnc care mgmt staff 1st 20 (99490)	$112,839,372	74.7%	63.7% - 85.6%	10.6%	88.0%	0.0%	0.0%	1.5%	0.4%
Initial hospital care (99222)	$99,139,127	18.7%	11.8% - 25.6%	4.6%	39.1%	0.0%	52.3%	4.0%	0.3%
Office o/p new hi 60-74 min (99205)	$68,790,598	16.3%	11.7% - 20.8%	0.0%	0.0%	0.0%	90.4%	9.6%	0.2%
Nursing fac care subseq (99310)	$68,213,784	36.9%	10.4% - 63.4%	2.6%	7.3%	0.0%	88.6%	1.5%	0.2%
Advncd care plan 30 min (99497)	$67,523,883	42.5%	25.0% - 60.1%	7.2%	90.0%	0.0%	0.0%	2.8%	0.2%
Nursing facility care init (99306)	$59,593,258	37.3%	23.9% - 50.8%	2.3%	9.0%	0.0%	88.7%	0.0%	0.2%
Subsequent hospital care (99232)	$59,250,403	2.7%	0.3% - 5.1%	3.1%	85.4%	0.0%	11.4%	0.0%	0.2%
Nursing fac care subseq (99309)	$45,397,842	7.0%	2.9% - 11.0%	0.7%	28.8%	0.0%	70.5%	0.0%	0.1%
Office o/p new low 30-44 min (99203)	$42,769,021	5.6%	1.5% - 9.8%	0.0%	0.0%	0.0%	54.4%	45.6%	0.1%
Initial observation care (99220)	$34,959,318	19.4%	12.0% - 26.8%	11.7%	29.9%	0.0%	46.3%	12.1%	0.1%
Emergency dept visit (99284)	$27,959,125	7.4%	2.8% - 11.9%	0.0%	43.0%	0.0%	57.0%	0.0%	0.1%
Hospital discharge day (99239)	$26,882,904	6.2%	2.4% - 10.1%	0.0%	80.1%	0.0%	19.9%	0.0%	0.1%
Office o/p est sf 10-19 min (99212)	$25,502,007	7.8%	3.0% - 12.6%	14.8%	14.6%	0.0%	70.6%	0.0%	0.1%
Off/op est may x req phy/qhp (99211)	$24,764,537	36.8%	24.6% - 48.9%	2.3%	75.7%	5.9%	12.7%	3.3%	0.1%
Nursing fac care subseq (99308)	$18,724,497	3.6%	(0.1%) - 7.3%	35.1%	56.1%	0.0%	8.8%	0.0%	0.1%
Cplx chrnc care 1st 60 min (99487)	$12,674,898	75.3%	63.1% - 87.6%	1.5%	98.5%	0.0%	0.0%	0.0%	0.0%
Nursing facility care init (99305)	$12,136,018	17.5%	11.6% - 23.4%	5.7%	26.5%	0.0%	56.9%	10.9%	0.0%
Overall (E&M Codes)	**$3,086,469,316**	**10.1%**	**9.0% - 11.2%**	**5.9%**	**32.4%**	**0.0%**	**52.7%**	**9.0%**	**9.6%**

Table K2: Impact of 1-Level E&M (Top 20)[19]

Final E & M Codes	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office o/p est mod 30-39 min (99214)	$235,012,739	2.8%	1.9% - 3.8%
Subsequent hospital care (99233)	$187,521,676	9.3%	7.6% - 11.1%
Emergency dept visit (99285)	$120,726,019	9.5%	6.2% - 12.9%
Initial hospital care (99223)	$106,624,449	7.1%	5.4% - 8.9%
Office o/p est hi 40-54 min (99215)	$96,937,740	8.2%	6.5% - 9.9%
Office o/p new mod 45-59 min (99204)	$60,107,586	4.5%	3.1% - 5.9%
Office o/p est low 20-29 min (99213)	$46,543,865	1.0%	0.1% - 1.9%
Office o/p new hi 60-74 min (99205)	$38,999,397	9.2%	6.6% - 11.9%
Initial hospital care (99222)	$28,564,923	5.4%	0.9% - 9.9%
Office o/p new low 30-44 min (99203)	$23,270,006	3.1%	0.6% - 5.5%
Nursing fac care subseq (99309)	$21,252,096	3.3%	1.6% - 5.0%
Office o/p est sf 10-19 min (99212)	$18,009,539	5.5%	1.8% - 9.2%
Nursing fac care subseq (99310)	$14,323,364	7.7%	3.4% - 12.1%
Nursing facility care init (99306)	$11,321,909	7.1%	4.2% - 10.0%
Initial observation care (99220)	$9,160,270	5.1%	2.6% - 7.6%
Emergency dept visit (99284)	$7,087,600	1.9%	0.0% - 3.7%
Hospital discharge day (99239)	$5,348,104	1.2%	0.3% - 2.2%
Nursing facility care init (99305)	$3,844,113	5.5%	2.8% - 8.3%
Subsequent hospital care (99232)	$2,726,998	0.1%	(0.0%) - 0.3%
Nursing fac care subseq (99308)	$1,654,163	0.3%	(0.3%) - 0.9%
All Other Codes	$44,698,359	0.1%	0.0% - 0.1%
Overall (1-Level E&M Codes)	**$1,083,734,913**	**1.0%**	**0.9% - 1.2%**

[19] Table K2 shows the improper payment rate estimate for claims that were found in error due to 1-Level E&M coding difference.

Table K3: Type of Services with Upcoding[20] Errors: Part B

Part B Services (BETOS Codes)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office visits - established	$397,844,411	2.7%	2.1% - 3.4%
Hospital visit - initial	$302,583,878	12.2%	10.3% - 14.1%
Hospital visit - subsequent	$210,421,447	4.2%	3.2% - 5.2%
Office visits - new	$169,674,474	6.2%	4.9% - 7.5%
Nursing home visit	$168,365,144	8.7%	3.5% - 13.9%
Emergency room visit	$138,161,918	8.0%	5.4% - 10.5%
Hospital visit - critical care	$130,372,194	11.8%	8.4% - 15.2%
Specialist - other	$13,394,458	0.5%	0.0% - 1.0%
Dialysis services (Medicare Fee Schedule)	$10,960,503	1.8%	(0.7%) - 4.3%
Echography/ultrasonography - other	$7,750,441	1.3%	(0.9%) - 3.5%
Minor procedures - other (Medicare fee schedule)	$7,281,197	0.2%	(0.0%) - 0.4%
Ambulance	$6,551,198	0.2%	(0.1%) - 0.5%
Chiropractic	$5,242,195	1.0%	(0.1%) - 2.1%
Ambulatory procedures - skin	$5,103,915	0.2%	(0.1%) - 0.4%
Specialist - ophthalmology	$4,147,234	0.2%	(0.2%) - 0.7%
Standard imaging - musculoskeletal	$2,681,443	0.7%	(0.2%) - 1.6%
Specialist - psychiatry	$2,522,204	0.2%	(0.1%) - 0.4%
Other tests - electrocardiograms	$2,313,247	1.0%	(0.6%) - 2.6%
Endoscopy - colonoscopy	$2,273,750	0.3%	(0.3%) - 0.9%
Other drugs	$1,939,329	0.0%	(0.0%) - 0.0%
All Other Codes	$66,481,279	0.2%	0.0% - 0.3%
Overall (Part B)	**$1,656,065,861**	**1.6%**	**1.3% - 1.8%**

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

Table K4: Type of Services with Upcoding Errors: DMEPOS

DMEPOS (Policy Group)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Urological Supplies	$5,470,647	1.6%	(0.7%) - 3.8%
Surgical Dressings	$4,307,944	1.5%	(0.1%) - 3.2%
Infusion Pumps & Related Drugs	$382,410	0.1%	(0.0%) - 0.1%
All Policy Groups with Less than 30 Claims	$305,194	0.0%	(0.0%) - 0.1%
CPAP	$275,057	0.0%	(0.0%) - 0.1%
Lower Limb Orthoses	$259,247	0.1%	(0.1%) - 0.2%
Wheelchairs Options/Accessories	$188,367	0.1%	(0.1%) - 0.2%
Hospital Beds/Accessories	$148,052	0.2%	(0.2%) - 0.7%
Glucose Monitor	$94,487	0.0%	(0.0%) - 0.0%
Ostomy Supplies	$13,728	0.0%	(0.0%) - 0.0%
Nebulizers & Related Drugs	$13,180	0.0%	(0.0%) - 0.0%
Parenteral Nutrition	$5,352	0.0%	(0.0%) - 0.0%
Immunosuppressive Drugs	$4,968	0.0%	(0.0%) - 0.0%
Overall (DMEPOS)	**$11,468,632**	**0.1%**	**0.0% - 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
Hospital Outpatient	$84,845,182	0.1%	(0.0%) - 0.3%
Nonhospital based hospice	$33,162,436	0.1%	(0.1%) - 0.4%
Home Health	$27,000,965	0.2%	(0.1%) - 0.4%
SNF Inpatient	$17,768,463	0.1%	0.0% - 0.1%
Clinical Rural Health	$14,675,746	0.9%	(0.8%) - 2.7%
CAH	$10,606,417	0.2%	(0.1%) - 0.4%
Hospital based hospice	$2,646,705	0.1%	(0.1%) - 0.4%
Hospital Other Part B	$234,292	0.0%	(0.0%) - 0.1%
Hospital Inpatient Part B	$195,473	0.0%	(0.0%) - 0.1%
Overall (Part A Excluding Hospital IPPS)	**$191,135,678**	**0.1%**	**0.0% - 0.2%**

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
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	$203,301,377	13.7%	(10.8%) - 38.1%
Respiratory Infections & Inflammations (177, 178, 179)	$43,750,644	0.6%	(0.2%) - 1.3%
Spinal Fusion Except Cervical (459, 460)	$29,253,003	2.1%	(1.9%) - 6.0%
Psychoses (885)	$26,894,551	0.9%	(0.9%) - 2.8%
Organic Disturbances & Intellectual Disability (884)	$26,409,499	4.8%	(3.1%) - 12.8%
Other Circulatory System Diagnoses (314, 315, 316)	$16,758,025	2.1%	(1.5%) - 5.7%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	$14,643,839	4.4%	(3.1%) - 12.0%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	$13,717,357	0.9%	(0.9%) - 2.8%
Chronic Obstructive Pulmonary Disease (190, 191, 192)	$13,708,838	2.6%	(1.1%) - 6.3%
Major Small & Large Bowel Procedures (329, 330, 331)	$13,558,896	0.5%	(0.3%) - 1.4%
Simple Pneumonia & Pleurisy (193, 194, 195)	$12,759,015	1.2%	(0.7%) - 3.2%
Kidney & Ureter Procedures For Non-Neoplasm (659, 660, 661)	$12,344,833	3.7%	(3.5%) - 10.9%
Kidney & Urinary Tract Infections (689, 690)	$11,198,144	1.0%	(0.3%) - 2.2%
Coronary Bypass W/O Cardiac Cath (235, 236)	$10,795,758	1.2%	(0.6%) - 3.0%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$8,841,302	0.1%	(0.1%) - 0.3%
Other Kidney & Urinary Tract Procedures (673, 674, 675)	$8,718,648	1.6%	(0.6%) - 3.8%
GI Hemorrhage (377, 378, 379)	$8,428,434	0.6%	(0.4%) - 1.7%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$7,457,533	0.4%	(0.4%) - 1.1%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$5,694,002	0.3%	(0.0%) - 0.7%
Major Chest Procedures (163, 164, 165)	$5,424,074	0.8%	(0.7%) - 2.2%
All Other Codes	$194,916,560	0.3%	0.1% - 0.4%
Overall (Part A Hospital IPPS)	**$688,574,334**	**0.6%**	**0.2% - 1.0%**

Appendix L: Overpayments

Tables L1 through L4 provide the service-specific overpayment rates for each claim type. 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	5,709	13,418	$242,245	$2,848,894	$2,904,742,208	5.8%	4.5% - 7.1%
Office o/p est mod 30-39 min (99214)	340	340	$1,967	$37,628	$410,637,206	5.0%	3.2% - 6.7%
Initial hospital care (99223)	448	448	$19,753	$84,861	$363,764,648	24.3%	20.7% - 27.9%
Subsequent hospital care (99233)	508	699	$10,344	$67,962	$321,214,557	16.0%	12.8% - 19.1%
Ppps, subseq visit (G0439)	286	286	$9,341	$31,603	$231,844,497	24.7%	16.9% - 32.5%
Therapeutic exercises (97110)	459	498	$3,726	$20,468	$195,070,988	17.7%	13.4% - 22.1%
Emergency dept visit (99285)	84	84	$1,901	$14,194	$189,249,960	15.0%	9.0% - 20.9%
Cov-19 amp prb hgh thruput (U0003)	109	109	$2,150	$8,224	$187,365,974	24.4%	14.3% - 34.6%
Critical care first hour (99291)	327	411	$12,517	$84,617	$173,900,311	16.2%	12.4% - 20.0%
Office o/p est hi 40-54 min (99215)	255	255	$5,807	$38,965	$163,789,892	13.8%	11.1% - 16.5%
Xcapsl ctrc rmvl w/o ecp (66984)	210	212	$13,465	$132,380	$146,067,233	9.7%	4.9% - 14.5%
Chiropract manj 3-4 regions (98941)	204	267	$2,930	$8,998	$124,164,949	32.1%	24.1% - 40.2%
Office o/p new mod 45-59 min (99204)	279	279	$3,943	$42,950	$116,057,343	8.7%	6.3% - 11.2%
Psytx w pt 60 minutes (90837)	85	120	$3,010	$14,327	$114,623,227	18.7%	6.8% - 30.6%
BLS (A0428)	142	147	$2,735	$25,283	$114,574,327	15.9%	4.9% - 26.8%
Chrnc care mgmt staff 1st 20 (99490)	84	84	$2,540	$3,358	$112,839,372	74.7%	63.7% - 85.6%
Initial hospital care (99222)	89	89	$2,003	$11,878	$97,723,378	18.4%	11.5% - 25.3%
ALS1-emergency (A0427)	82	82	$1,957	$36,236	$94,079,480	6.6%	0.4% - 12.7%
Manual therapy 1/> regions (97140)	453	495	$2,549	$13,711	$89,046,750	18.6%	13.9% - 23.3%
Therapeutic activities (97530)	389	398	$4,096	$21,725	$88,030,935	17.3%	12.0% - 22.7%
All Other Codes	9,133	13,089	$897,472	$9,546,547	$2,334,696,492	7.7%	6.8% - 8.5%
Total (Part B)	**14,072**	**31,810**	**$1,246,450**	**$13,094,808**	**$8,573,483,726**	**8.0%**	**7.2% - 8.9%**

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	3,438	7,089	$727,186	$4,197,469	$711,986,850	31.5%	24.6% - 38.3%
Home vent non-invasive inter (E0466)	316	320	$68,659	$321,151	$96,087,761	20.0%	15.2% - 24.7%
Oxygen concentrator (E1390)	356	366	$4,135	$28,953	$74,061,875	14.9%	10.1% - 19.7%
Ther cgm supply allowance (K0553)	266	269	$9,502	$60,953	$64,025,811	15.0%	10.5% - 19.5%
Ko single upright prefab ots (L1851)	261	317	$133,000	$196,842	$60,391,533	69.8%	61.4% - 78.3%
CPAP full face mask (A7030)	160	160	$4,842	$16,206	$45,613,686	28.6%	20.7% - 36.5%
Replacement facemask interfa (A7031)	273	277	$7,042	$23,647	$42,942,514	28.5%	20.9% - 36.0%
Coude tip urinary catheter (A4352)	116	116	$33,798	$115,887	$40,161,307	27.1%	16.4% - 37.9%
Hizentra injection (J1559)	46	50	$39,224	$184,284	$37,529,228	21.9%	7.1% - 36.8%
LSO sc r ant/pos pnl pre ots (L0650)	140	140	$44,004	$100,982	$35,660,495	48.0%	36.1% - 59.9%
Blood glucose/reagent strips (A4253)	129	137	$800	$2,885	$28,712,951	26.3%	14.9% - 37.7%
Parenteral sol 74-100 gm pro (B4197)	129	164	$53,640	$187,327	$28,206,935	33.0%	22.0% - 43.9%
Intermittent urinary cath (A4353)	45	47	$23,023	$56,614	$27,390,174	47.0%	24.9% - 69.0%
LSO sag r an/pos pnl pre ots (L0648)	61	61	$27,916	$46,614	$27,322,393	54.9%	39.9% - 69.8%
Replacement nasal cushion (A7032)	175	177	$4,982	$16,135	$26,663,561	26.4%	15.9% - 37.0%
Ko adj jnt pos r sup pre ots (L1833)	94	112	$31,544	$51,649	$24,196,062	57.8%	45.0% - 70.6%
Nasal application device (A7034)	129	129	$1,634	$8,510	$23,278,451	17.9%	10.4% - 25.4%
Pneum compressor segmental (E0651)	45	45	$32,744	$44,052	$23,272,970	74.4%	60.8% - 88.0%
Neg press wound therapy pump (E2402)	47	47	$11,762	$30,447	$22,697,993	37.7%	19.3% - 56.0%
Cont airway pressure device (E0601)	63	63	$171	$2,815	$22,392,383	16.4%	3.9% - 29.0%
All Other Codes	6,036	10,737	$803,931	$4,489,213	$708,133,676	20.7%	19.1% - 22.4%
Total (DMEPOS)	**9,398**	**20,823**	**$2,063,537**	**$10,182,638**	**$2,170,728,611**	**25.0%**	**23.0% - 27.0%**

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
SNF Inpatient	1,266	$2,086,367	$10,098,103	$5,557,508,811	15.8%	12.9% - 18.7%
Hospital Outpatient	1,899	$153,099	$3,202,686	$4,059,331,627	5.1%	3.2% - 7.0%
Nonhospital based hospice	620	$288,907	$2,357,128	$2,623,262,740	11.8%	8.8% - 14.8%
Home Health	999	$272,059	$1,656,059	$1,742,984,203	9.9%	7.7% - 12.2%
Hospital Inpatient (Part A)	796	$2,309,943	$15,065,845	$1,407,046,587	13.3%	10.2% - 16.3%
CAH	224	$8,056	$110,826	$502,761,424	8.1%	2.0% - 14.1%
Hospital based hospice	124	$83,763	$465,302	$266,844,185	14.9%	8.2% - 21.5%
SNF Inpatient Part B	76	$4,798	$70,024	$203,527,234	7.0%	(1.8%) - 15.7%
Clinic ESRD	526	$20,063	$1,570,127	$145,529,438	1.2%	0.2% - 2.2%
Hospital Other Part B	81	$471	$3,287	$89,944,531	15.3%	7.9% - 22.7%
Clinic OPT	52	$2,245	$15,273	$86,430,957	10.9%	0.3% - 21.6%
SNF Outpatient	44	$4,788	$40,821	$50,007,199	12.9%	1.9% - 24.0%
Clinical Rural Health	207	$786	$33,876	$45,830,474	2.8%	0.5% - 5.1%
FQHC	64	$282	$8,387	$37,497,951	3.4%	(0.7%) - 7.5%
Hospital Inpatient Part B	47	$1,598	$64,053	$33,595,962	4.6%	(2.5%) - 11.7%
Home Health (Part B Only)	2	$373	$416	$12,079,976	89.6%	63.8% - 115.4%
Clinic CORF	60	$5,769	$11,946	$10,896,394	47.4%	23.2% - 71.6%
All Other Codes	1	$0	$1,158	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**7,088**	**$5,243,368**	**$34,775,316**	**$16,875,079,693**	**8.7%**	**7.6% - 9.8%**

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

Part A Inpatient Hospital PPS Services (DRG)	Claims Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,557	$1,137,333	$40,400,752	$1,222,848,767	3.6%	2.1% - 5.1%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	1,090	$3,654,756	$13,630,009	$539,302,160	24.4%	20.0% - 28.7%
Psychoses (885)	96	$70,674	$1,027,182	$251,321,331	8.8%	(1.1%) - 18.8%
Percutaneous Intracardiac Procedures W/O MCC (274)	160	$1,196,922	$3,791,009	$247,947,491	30.9%	23.4% - 38.4%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	295	$1,436,221	$12,170,931	$162,922,965	11.5%	7.7% - 15.3%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	199	$1,268,831	$10,320,491	$147,291,428	12.6%	8.0% - 17.1%
Respiratory Infections & Inflammations W MCC (177)	106	$52,875	$1,826,937	$113,139,912	1.6%	(0.4%) - 3.6%
Syncope & Collapse (312)	55	$64,598	$368,999	$66,774,549	16.0%	(0.2%) - 32.1%
Spinal Fusion Except Cervical W/O MCC (460)	114	$233,130	$3,402,856	$64,505,785	5.6%	1.4% - 9.8%
Organic Disturbances & Intellectual Disability (884)	49	$55,138	$658,928	$47,382,064	8.7%	(0.8%) - 18.2%
Cervical Spinal Fusion W CC (472)	90	$255,414	$2,181,734	$43,029,736	17.8%	5.7% - 30.0%
Cardiac Defibrillator Implant W/O Cardiac Cath W MCC (226)	44	$434,303	$2,053,710	$41,044,474	21.6%	11.3% - 31.9%
Other Vascular Procedures W MCC (252)	49	$58,987	$1,188,918	$35,851,231	4.9%	(1.9%) - 11.7%
GI Hemorrhage W MCC (377)	59	$32,011	$776,266	$33,452,690	4.7%	(1.0%) - 10.4%
Medical Back Problems W/O MCC (552)	57	$42,146	$403,349	$32,381,024	10.4%	1.8% - 19.0%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck W/O Maj OR (004)	54	$153,855	$5,593,204	$29,018,501	2.1%	(1.7%) - 5.9%
Degenerative Nervous System Disorders W/O MCC (057)	195	$147,397	$2,171,071	$28,083,621	6.2%	1.9% - 10.4%
Extensive OR Procedure Unrelated To Principal Diagnosis W MCC (981)	47	$36,802	$1,988,578	$26,226,936	2.4%	(1.6%) - 6.4%
Heart Failure & Shock W MCC (291)	105	$5,160	$1,194,289	$25,881,017	0.8%	(0.8%) - 2.4%
Cardiac Defibrillator Implant W/O Cardiac Cath W/O MCC (227)	87	$592,350	$2,943,059	$24,189,573	19.5%	10.7% - 28.3%
All Other Codes	5,932	$4,521,832	$127,400,111	$607,052,697	1.1%	0.9% - 1.4%
Total (Part A Hospital IPPS)	**11,440**	**$15,450,734**	**$235,492,383**	**$3,789,647,950**	**3.3%**	**2.8% - 3.9%**

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	**41,998**	**$24,004,089**	**$293,545,146**	**$31,408,939,981**	**7.4%**	**6.9% - 8.0%**

Appendix M: Underpayments

The following tables provide the service-specific underpayment rates for each claim type. 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 (HCPCS Codes)	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	5,709	13,418	$12,155	$2,848,894	$79,056,690	0.2%	0.0% - 0.3%
Office o/p est low 20-29 min (99213)	294	294	$117	$22,557	$27,142,293	0.6%	(0.1%) - 1.3%
Inj., rituximab, 10 mg (J9312)	87	111	$9,337	$636,844	$19,056,954	5.9%	(5.8%) - 17.6%
Office o/p est sf 10-19 min (99212)	97	98	$309	$4,399	$18,009,539	5.5%	1.8% - 9.2%
Infliximab not biosimil 10mg (J1745)	87	107	$5,188	$208,216	$9,988,833	3.9%	(1.5%) - 9.3%
Therapeutic exercises (97110)	459	498	$119	$20,468	$5,579,036	0.5%	(0.1%) - 1.1%
Ground mileage (A0425)	243	247	$65	$20,764	$3,049,590	0.4%	(0.2%) - 0.9%
Emergency dept visit (99284)	89	89	$110	$10,549	$2,803,507	0.7%	(0.3%) - 1.7%
Ppps, subseq visit (G0439)	286	286	$129	$31,603	$2,709,301	0.3%	(0.1%) - 0.6%
Off/op est may x req phy/qhp (99211)	88	90	$74	$1,684	$2,509,133	3.7%	(1.6%) - 9.1%
Subsequent hospital care (99232)	206	349	$56	$24,462	$2,164,959	0.1%	(0.0%) - 0.2%
Nursing fac care subseq (99308)	111	120	$25	$7,600	$1,654,163	0.3%	(0.3%) - 0.9%
Manual therapy 1/> regions (97140)	453	495	$72	$13,711	$1,522,176	0.3%	(0.1%) - 0.7%
Initial hospital care (99222)	89	89	$61	$11,878	$1,415,749	0.3%	(0.3%) - 0.8%
Psytx w pt 45 minutes (90834)	87	112	$37	$9,407	$1,076,115	0.3%	(0.3%) - 1.0%
Chiropract manj 1-2 regions (98940)	135	153	$37	$3,953	$966,428	1.0%	(0.1%) - 2.2%
Neuromuscular reeducation (97112)	433	445	$31	$18,664	$415,548	0.1%	(0.1%) - 0.3%
Office o/p new low 30-44 min (99203)	88	88	$58	$8,149	$207,438	0.0%	(0.0%) - 0.1%
Destroy c/th facet jnt addl (64634)	214	277	$543	$35,250	$198,518	1.6%	(0.0%) - 3.3%
Golimumab for iv use 1mg (J1602)	88	132	$145	$288,151	$71,944	0.0%	(0.0%) - 0.1%
All Other Codes	10,458	14,312	$274	$8,867,607	$75,698	0.0%	(0.0%) - 0.0%
Total (Part B)	**14,072**	**31,810**	**$28,940**	**$13,094,808**	**$179,673,613**	**0.2%**	**0.1% - 0.3%**

Table M2: Service-Specific Underpayment Rates: DMEPOS

DMEPOS (HCPCS)	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	3,438	7,089	$10,507	$4,197,469	$7,040,362	0.3%	(0.0%) - 0.6%
Replacement facemask interfa (A7031)	273	277	$163	$23,647	$3,243,978	2.2%	(1.8%) - 6.1%
CPAP full face mask (A7030)	160	160	$113	$16,206	$2,625,945	1.6%	(1.6%) - 4.9%
Alginate drsg >16 <=48 sq in (A6197)	58	61	$554	$28,126	$2,103,367	7.1%	(7.1%) - 21.2%
Insulin for insulin pump use (J1817)	48	48	$365	$43,848	$1,782,329	1.8%	(1.7%) - 5.2%
Alginate dressing <=16 sq in (A6196)	70	74	$436	$17,633	$1,314,394	4.0%	(2.2%) - 10.3%
Pos airway pressure filter (A7038)	426	432	$21	$5,255	$423,458	0.9%	(0.8%) - 2.6%
Ost pch drain for barrier fl (A4425)	37	37	$67	$3,997	$317,326	2.9%	(3.0%) - 8.9%
Ost skn barrier sld ext wear (A4385)	60	60	$47	$9,082	$225,789	0.9%	(0.9%) - 2.7%
Socket insert w lock mech (L5673)	68	69	$1,462	$88,919	$214,715	0.7%	(0.7%) - 2.1%
Lancets per box (A4259)	364	368	$1	$628	$42,302	0.9%	(0.9%) - 2.7%
Infusion supplies with pump (A4222)	172	179	$129	$76,895	$35,413	0.1%	(0.1%) - 0.4%
Ipratropium bromide non-comp (J7644)	52	52	$4	$534	$10,473	0.8%	(0.3%) - 1.8%
Prednisone ir or dr oral 1mg (J7512)	79	79	$3	$154	$8,439	1.3%	(0.6%) - 3.1%
All Other Codes	6,947	11,838	$0	$5,670,246	$0	0.0%	0.0% - 0.0%
Total (DMEPOS)	**9,398**	**20,823**	**$13,872**	**$10,182,638**	**$19,388,293**	**0.2%**	**0.0% - 0.4%**

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	1,899	1,899	$7,690	$3,202,686	$212,207,890	0.3%	(0.1%) - 0.6%
Home Health	999	999	$4,275	$1,656,059	$27,277,277	0.2%	0.0% - 0.3%
Hospital Inpatient Part B	47	47	$765	$64,053	$7,576,862	1.0%	(0.9%) - 3.0%
Hospital Other Part B	81	81	$17	$3,287	$4,921,330	0.8%	(0.6%) - 2.3%
Nonhospital based hospice	620	620	$139	$2,357,128	$1,166,603	0.0%	(0.0%) - 0.0%
SNF Inpatient	1,266	1,266	$278	$10,098,103	$702,765	0.0%	(0.0%) - 0.0%
Hospital based hospice	124	124	$57	$465,302	$182,586	0.0%	(0.0%) - 0.0%
All Other Codes	2,052	2,052	$0	$16,928,699	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**7,088**	**7,088**	**$13,220**	**$34,775,316**	**$254,035,313**	**0.1%**	**(0.0%) - 0.3%**

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

Part A Hospital IPPS Services (DRG)	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	2,557	2,557	$197,406	$40,400,752	$192,050,030	0.6%	0.0% - 1.1%
Respiratory Infections & Inflammations W MCC (177)	106	106	$5,553	$1,826,937	$34,947,424	0.5%	(0.4%) - 1.4%
Septicemia Or Severe Sepsis W/O MV >96 Hours W MCC (871)	99	99	$4,641	$1,548,970	$26,148,056	0.3%	(0.3%) - 0.9%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	1,090	1,090	$19,607	$13,630,009	$12,595,441	0.6%	(0.4%) - 1.6%
Simple Pneumonia & Pleurisy W CC (194)	56	56	$7,035	$364,822	$5,827,005	2.6%	(2.2%) - 7.4%
Spinal Fusion Except Cervical W/O MCC (460)	114	114	$17,221	$3,402,856	$5,634,293	0.5%	(0.5%) - 1.4%
Heart Failure & Shock W CC (292)	51	51	$4,567	$329,498	$5,473,730	1.4%	(1.2%) - 4.0%
Renal Failure W MCC (682)	78	78	$5,467	$803,450	$5,163,757	0.6%	(0.5%) - 1.7%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck W/O Maj OR (004)	54	54	$23,991	$5,593,204	$4,927,722	0.4%	(0.2%) - 0.9%
Intracranial Hemorrhage Or Cerebral Infarction W MCC (064)	67	67	$7,638	$995,515	$3,514,131	0.3%	(0.3%) - 1.0%
Combined Anterior/Posterior Spinal Fusion W/O CC/MCC (455)	137	137	$13,304	$4,623,156	$2,433,587	0.4%	(0.3%) - 1.1%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	295	295	$9,543	$12,170,931	$2,169,591	0.2%	(0.1%) - 0.5%
Esophagitis, Gastroent & Misc Digest Disorders W/O MCC (392)	50	50	$997	$284,566	$1,999,296	0.4%	(0.4%) - 1.2%
Simple Pneumonia & Pleurisy W MCC (193)	71	71	$3,944	$667,700	$1,916,924	0.3%	(0.2%) - 0.8%
Coronary Bypass W/O Cardiac Cath W MCC (235)	61	61	$26,723	$2,760,238	$1,906,216	0.5%	(0.1%) - 1.2%
Coronary Bypass W/O Cardiac Cath W/O MCC (236)	90	90	$12,425	$2,757,807	$1,875,304	0.4%	(0.1%) - 0.9%
Transient Ischemia W/O Thrombolytic (069)	50	50	$1,929	$245,134	$1,587,598	1.0%	(0.9%) - 3.0%
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes W/O MCC (641)	51	51	$1,112	$298,477	$1,500,501	0.4%	(0.4%) - 1.2%
Peripheral Vascular Disorders W CC (300)	48	48	$2,622	$388,197	$1,200,896	0.6%	(0.6%) - 1.9%
Kidney & Urinary Tract Infections W/O MCC (690)	51	51	$539	$334,379	$1,096,447	0.2%	(0.2%) - 0.6%
All Other Codes	6,264	6,264	$118,026	$142,065,785	$11,659,288	0.0%	0.0% - 0.0%
Total (Part A Hospital IPPS)	**11,440**	**11,440**	**$484,289**	**$235,492,383**	**$325,627,236**	**0.3%**	**0.1% - 0.5%**

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	**41,998**	**71,161**	**$540,321**	**$293,545,146**	**$778,724,455**	**0.2%**	**0.1% - 0.3%**

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 most jurisdictions should observe ample number of claims to obtain internal precision goals of plus or minus three percentage points with 95% confidence.

Enhanced Stratification
In addition, CERT uses sub-strata for strata that represent high total payments as well as exhibit heterogeneity in improper payment rate by provider. Sub-strata consist of two or more strata contained within a service level stratum and are defined by provider profile scores. Additionally, the CERT Hospital Outpatient stratum has been divided into high and low payment strata to sample the larger payment claims more effectively, while ensuring a specific level of lower payment hospital outpatient claims. These sub-strata have been developed with CMS collaboration to increase CERT's ability to adequately sample not just services, but also providers who are more likely to have improper billing.

For RY2022, the following strata contain sub-strata:

- Home Health
- Hospital Outpatient
- Inpatient Rehab Facility
- Skilled Nursing Facility

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.[21] 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.

The estimator for a domain, d, is expressed as

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

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'

[21] 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 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	13,418	1,900	14.2%
Critical care first hour (99291)	409	114	27.9%
Initial hospital care (99223)	448	185	41.3%
Manual therapy 1/> regions (97140)	495	83	16.8%
Neuromuscular reeducation (97112)	445	77	17.3%
Routine venipuncture (36415)	488	67	13.7%
Subsequent hospital care (99232)	348	21	6.0%
Subsequent hospital care (99233)	692	220	31.8%
Therapeutic activities (97530)	398	70	17.6%
Therapeutic exercises (97110)	498	86	17.3%
Other	14,161	2,446	17.3%
TOS Code			
All Codes With Less Than 30 Claims	2,147	129	6.0%
Hospital visit - subsequent	1,265	283	22.4%
Lab tests - other (non-Medicare fee schedule)	4,320	1,124	26.0%
Major procedure - Other	892	178	20.0%
Minor procedures - other (Medicare fee schedule)	3,198	495	15.5%
Office visits - established	1,121	203	18.1%
Other drugs	2,250	285	12.7%
Other tests - other	1,044	182	17.4%
Specialist - other	1,522	311	20.4%
Undefined codes	1,100	27	2.5%
Other	12,941	2,052	15.9%
Resolution Type[22]			
Automated	7,659	518	6.8%
Complex	2	0	0.0%
None	24,133	4,750	19.7%
Routine	6	1	16.7%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,905	330	17.3%
Diabetes mellitus	959	145	15.1%
Diseases of arteries, arterioles and capillaries	1,568	103	6.6%

[22] 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
Disorders of choroid and retina	1,030	26	2.5%
Other dorsopathies	1,187	204	17.2%
Persons encountering health services for examinations	1,357	216	15.9%
Persons with potential health hazards related to communicable diseases	958	92	9.6%
Persons with potential health hazards related to family and personal history and certain conditions	1,502	461	30.7%
Spondylopathies	859	190	22.1%
Symptoms and signs involving the circulatory and respiratory systems	921	184	20.0%
Other	19,554	3,318	17.0%

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	7,089	1,769	25.0%
Disp fee inhal drugs/30 days (Q0513)	342	63	18.4%
Home vent non-invasive inter (E0466)	320	65	20.3%
Ko single upright prefab ots (L1851)	317	174	54.9%
Lancets per box (A4259)	368	126	34.2%
Nebulizer with compression (E0570)	384	25	6.5%
Oxygen concentrator (E1390)	366	40	10.9%
Parenteral administration ki (B4224)	362	71	19.6%
Parenteral supply kit premix (B4220)	312	67	21.5%
Pos airway pressure filter (A7038)	432	140	32.4%
Other	10,531	2,930	27.8%
TOS Code			
All Policy Groups with Less than 30 Claims	887	184	20.7%
CPAP	2,323	624	26.9%
Glucose Monitor	902	243	26.9%
Infusion Pumps & Related Drugs	1,025	227	22.1%
Lower Limb Orthoses	1,092	564	51.6%
Lower Limb Prostheses	2,342	472	20.2%
Nebulizers & Related Drugs	1,843	289	15.7%
Parenteral Nutrition	1,303	257	19.7%
Surgical Dressings	1,123	446	39.7%
Wheelchairs Options/Accessories	1,154	187	16.2%
Other	6,829	1,977	29.0%
Resolution Type[23]			
Automated	3,720	116	3.1%
Complex	7	1	14.3%
None	17,024	5,324	31.3%
Routine	72	29	40.3%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,399	286	20.4%
Cerebral palsy and other paralytic syndromes	506	85	16.8%
Chronic lower respiratory diseases	2,353	381	16.2%
Diabetes mellitus	1,841	622	33.8%
Episodic and paroxysmal disorders	2,428	627	25.8%
Injuries to the knee and lower leg	434	120	27.6%
Malnutrition	513	31	6.0%
Osteoarthritis	885	528	59.7%

[23] 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
Other disorders of the skin and subcutaneous tissue	811	299	36.9%
Persons with potential health hazards related to family and personal history and certain conditions	3,696	872	23.6%
Other	5,957	1,619	27.2%

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	526	19	3.6%
Clinical Rural Health	207	9	4.3%
CAH	224	47	21.0%
Home Health	999	210	21.0%
Hospital Inpatient (Part A)	796	124	15.6%
Hospital Other Part B	81	25	30.9%
Hospital Outpatient	1,899	190	10.0%
Hospital based hospice	124	28	22.6%
Nonhospital based hospice	620	100	16.1%
SNF Inpatient	1,266	293	23.1%
Other	346	78	22.5%
TOS Code			
Clinic ESRD	526	19	3.6%
Clinical Rural Health	207	9	4.3%
CAH	224	47	21.0%
Home Health	999	210	21.0%
Hospital Inpatient (Part A)	796	124	15.6%
Hospital Other Part B	81	25	30.9%
Hospital Outpatient	1,899	190	10.0%
Hospital based hospice	124	28	22.6%
Nonhospital based hospice	620	100	16.1%
SNF Inpatient	1,266	293	23.1%
Other	346	78	22.5%
Diagnosis Code			
Acute kidney failure and chronic kidney disease	588	30	5.1%
All Codes With Less Than 30 Claims	481	57	11.9%
Cerebrovascular diseases	298	59	19.8%
Diabetes mellitus	249	52	20.9%
Encounters for other specific health care	375	71	18.9%
Hypertensive diseases	298	83	27.9%
Ischemic heart diseases	163	29	17.8%
No Matching Diagnosis Code Label	357	86	24.1%
Other degenerative diseases of the nervous system	227	32	14.1%
Other forms of heart disease	296	34	11.5%
Other	3,756	590	15.7%

Table N4: Claims in Error: Part A Hospital IPPS

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
DRG Label			
Aftercare, Musculoskeletal System & Connective Tissue W CC (560)	228	40	17.5%
Aftercare, Musculoskeletal System & Connective Tissue W/O CC/MCC (561)	148	34	23.0%
All Codes With Less Than 30 Claims	2,557	276	10.8%
Combined Anterior/Posterior Spinal Fusion W/O CC/MCC (455)	137	16	11.7%
Degenerative Nervous System Disorders W/O MCC (057)	195	42	21.5%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	199	45	22.6%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	295	50	16.9%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	1,090	327	30.0%
Percutaneous Intracardiac Procedures W/O MCC (274)	160	52	32.5%
Spinal Fusion Except Cervical W/O MCC (460)	114	15	13.2%
Other	6,317	803	12.7%
TOS Code			
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	378	74	19.6%
All Codes With Less Than 30 Claims	1,955	249	12.7%
Cervical Spinal Fusion (471, 472, 473)	181	33	18.2%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	225	24	10.7%
Degenerative Nervous System Disorders (056, 057)	246	48	19.5%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	494	95	19.2%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	1,143	335	29.3%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	195	36	18.5%
Percutaneous Intracardiac Procedures (273, 274)	169	54	32.0%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	192	10	5.2%
Other	6,262	742	11.8%
Diagnosis Code			
All Codes With Less Than 30 Claims	419	49	11.7%
Cerebrovascular diseases	304	40	13.2%
Complications of surgical and medical care, not elsewhere classified	774	94	12.1%
Hypertensive diseases	429	58	13.5%
Ischemic heart diseases	498	48	9.6%
Osteoarthritis	1,210	353	29.2%
Other bacterial diseases	365	22	6.0%
Other diseases of intestines	264	31	11.7%
Other forms of heart disease	1,068	195	18.3%

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
Spondylopathies	553	99	17.9%
Other	5,556	711	12.8%

Table N5: Frequency of Claims "Included In" and "Excluded From" Paid Claims[24] Improper Payment Rate by Claim Type

Claim Type	Included	Excluded	Total	Percent Included
Part B	14,072	348	14,420	97.6%
DMEPOS	9,398	207	9,605	97.8%
Part A Including Hospital IPPS[25]	18,528	10,148	28,676	64.6%

[24] The paid claim improper payment rate includes paid line items, unpaid line items, line items denied for non-medical reasons, as well as automated medical review denials. The paid claim improper payment rate excludes no resolution, RTP, late resolution as well as inpatient, RAPS, or technical error line items.
[25] Part A Including Hospital IPPS includes Part A (Hospital IPPS) and Part A (Excluding Hospital IPPS).

Appendix O: List of Acronyms

Acronym	Definition
AFR	Agency Financial Report
AICD	Automatic Implantable Cardioverter Defibrillator
ALS	Advanced Life Support
AMI	Acute Myocardial Infarction
ANSI	American National Standards Institute
ASC	Accredited Standards Committee
AWV	Annual Wellness Visit
BETOS	Berenson-Eggers Type of Service
BLS	Basic Life Support
CAH	Critical Access Hospital
CAT/CT/CTA	Computed Axial Tomography/Computed Tomography/Computed Tomography Angiography
CC	Comorbidity or Complication
CCM	Chronic Care Management
CERT	Comprehensive Error Rate Testing
CGM	Continuous Glucose Monitor
CMG	Case Mix Group
CMS	Centers for Medicare & Medicaid Services
CORF	Comprehensive Outpatient Rehabilitation Facility
CPAP	Continuous Positive Airway Pressure
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics & Supplies
DRG	Diagnosis Related Group
ECMO	Extracorporeal Membrane Oxygenation
E&M	Evaluation and Management
ESRD	End-Stage Renal Disease
FFS	Fee-For-Service
FQHC	Federally Qualified Health Center
FY	Fiscal Year
GI	Gastrointestinal
HCPCS	Healthcare Common Procedure Coding System
HFCWO	High Frequency Chest Wall Oscillation
HHA	Home Health Agency
HHS	Department of Human and Health Services
HIPPS	Health Insurance Prospective Payment System
IDTF	Independent Diagnostic Testing Facility
IPPS	Inpatient Prospective Payment System
LSO	Lumbar-Sacral Orthosis
MAC	Medicare Administrative Contractor
MCC	Major Complication or Comorbidity
MS-DRG	Medicare Severity Diagnosis Related Group
MV	Mechanical Ventilation
NCD	National Coverage Determination

Acronym	Definition
OMB	Office of Management and Budget
OPT	Outpatient Physical Therapy
OPPS	Outpatient Prospective Payment System
OR	Operating Room
ORF	Outpatient Rehabilitation Facility
PDX	Principal Diagnosis
PIIA	Payment Integrity Information Act of 2019
PPS	Prospective Payment System
RAP	Request for Advanced Payment
RHC	Rural Health Clinic
RTP	Return to Provider
RUG	Resource Utilization Group
SIA	Service Intensity Add-On
SNF	Skilled Nursing Facility
TOB	Type of Bill
TOS	Type of Service
UB	Uniform Billing
UOS	Units of Service
W	With
W/O	Without