U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

2023 Medicare Fee-for-Service Supplemental Improper Payment Data

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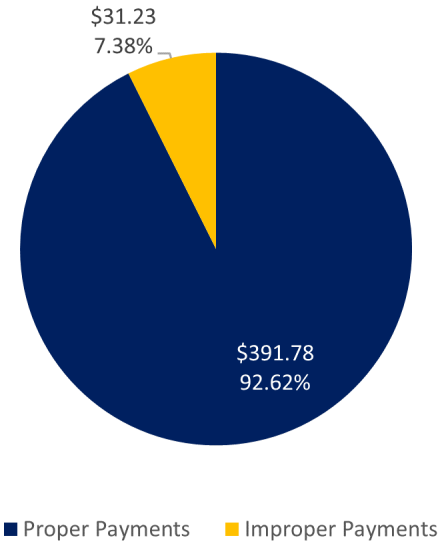
SUMMARY OF HIGH LEVEL FINDINGS

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.

92.62 Percent Accuracy Rate and 7.38 Percent Improper Payment Rate[1,2,3]

Figure 1: Payment Accuracy (in Billions)



[1] HHS published the 2023 Medicare FFS improper payment rate in the Federal FY 2023 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 2023 Medicare FFS improper payment rate included claims submitted during the 12-month period from July 1, 2021 through June 30, 2022.

[2] CMS adjusted the improper payment rate by 0.23 percentage points ($972.08 million) from 7.61 percent to 7.38 percent to account for the effect of rebilling inpatient hospital claims denied under Medicare Part A (Part A to B rebilling). The Part A to B rebilling adjustment factor was calculated by selecting a random sub-sample of Part A inpatient claims selected by the CERT program and repricing the individual services provided under Part B. Because this repricing process was not applied to all of the Part A inpatient claims selected by the CERT program, the Part A to B rebilling adjustment factor could only be applied to the high-level calculations (i.e., the overall, Part A Total, and Part A Hospital IPPS improper payment rates). This methodology is unchanged from 2012 through 2023.

[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 2023 National Improper Payments[4]

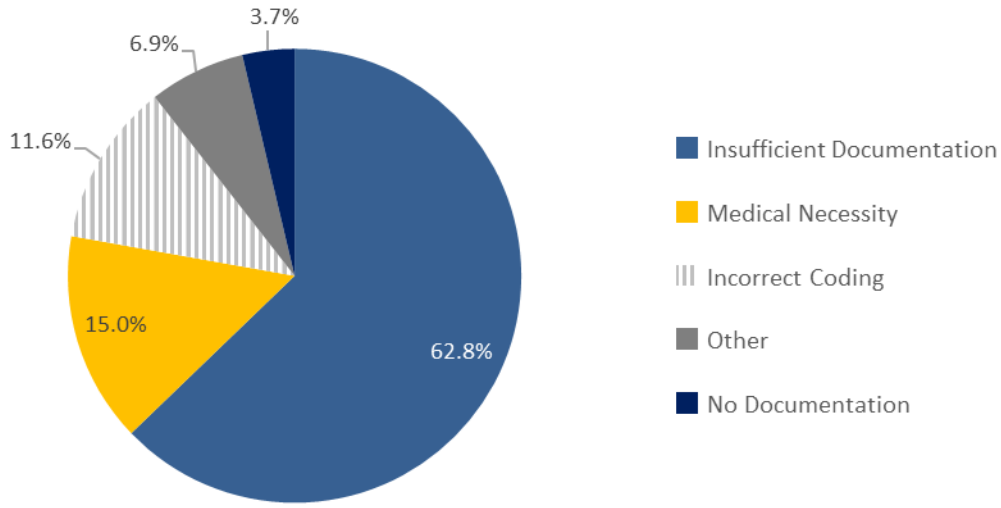
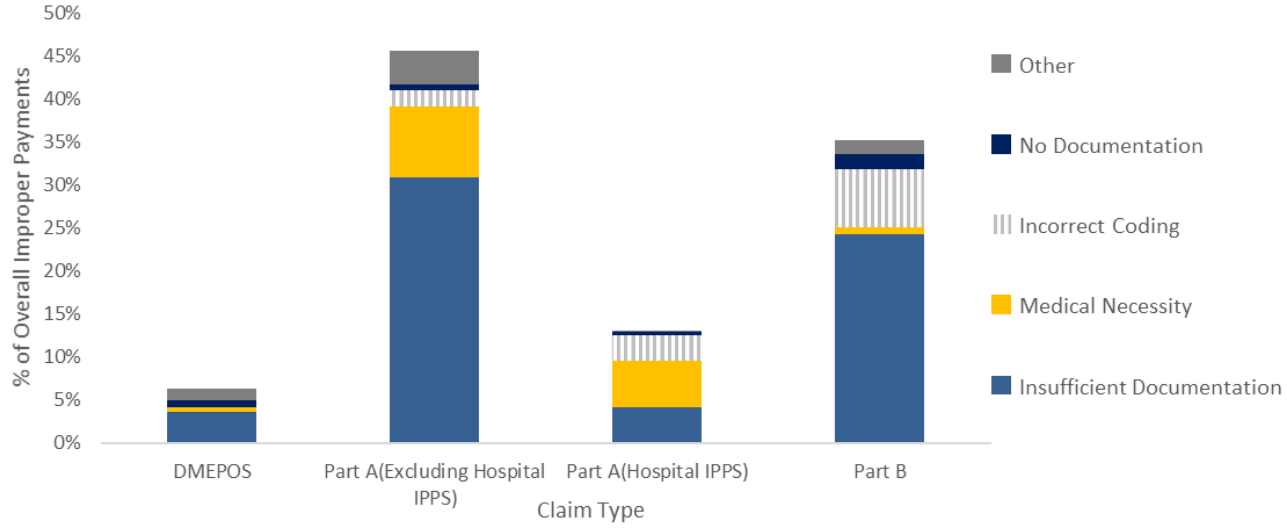


Figure 3: Improper Payment Rate Error Categories by Percentage of 2023 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling)[5]

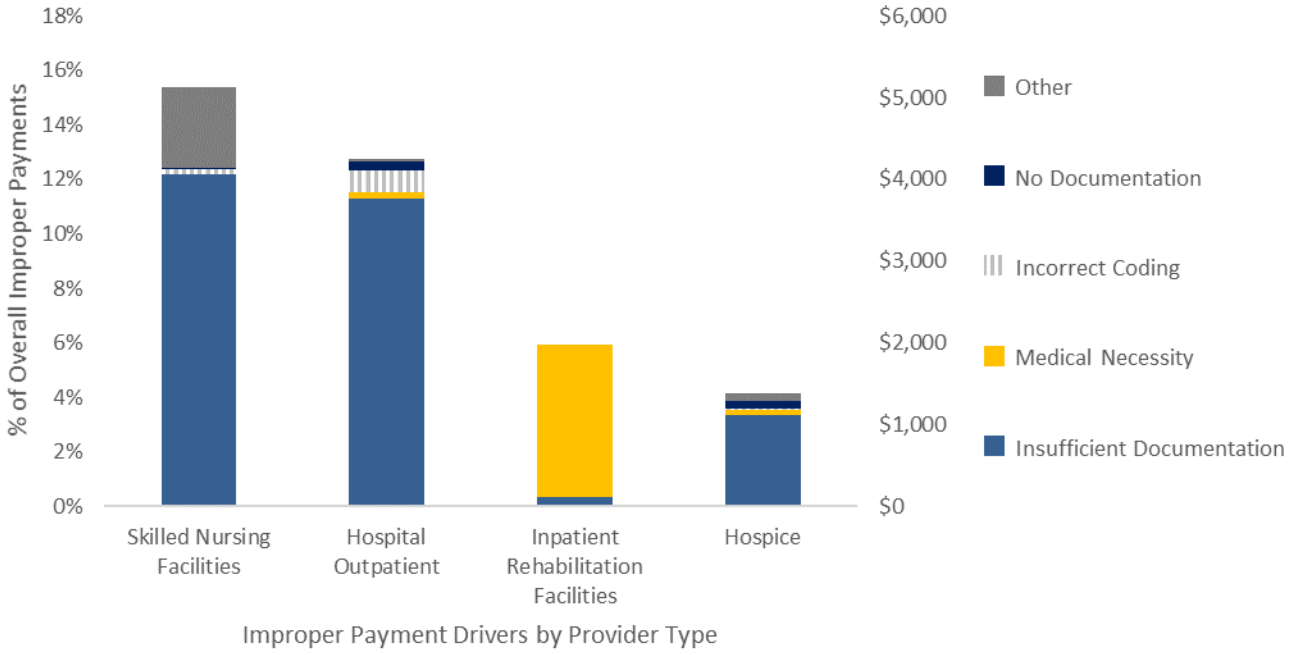


[4] The percentages in this pie chart may not add up to 100 percent due to rounding.

[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 2023 reporting period, the Medicare FFS improper payment drivers are: Skilled Nursing Facilities, Hospital Outpatient, Inpatient Rehabilitation Facilities, and Hospice. The following figure and tables will provide additional information about the improper payment drivers. Root causes associated with fewer than 5 sampled claims are excluded in Tables 1 through 13.

Figure 4: Improper Payment Rate Error Categories by Percentage of 2023 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 2023 report period was $4.8 billion, resulting in an improper payment rate of 13.8 percent.

Table 1: Top Root Causes for Skilled Nursing Facility

Root Cause Description	Error Category	Sample Claim Count[6]
HIPPS level changed based on documentation submitted*	Insufficient Documentation	195
Case Mix Group (CMG) component documentation - Missing	Insufficient Documentation	147
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	85
Order - Missing	Insufficient Documentation	74
Nursing home records - Missing	Insufficient Documentation	62
Signature log to support a clear identity of an illegible signature - Missing	Insufficient Documentation	51
Physician's Certification/Recertification - Missing	Insufficient Documentation	39
Order - Inadequate	Insufficient Documentation	36
Physical/Occupational/Speech Therapy - Plan of care - Missing	Insufficient Documentation	26
HIPPS/RUG level in the repository does not match the RUG level billed	Other	18
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

[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 2023 report period was $4.0 billion, resulting in an improper payment rate of 5.2 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	71
Order - Missing	Insufficient Documentation	59
Order - Inadequate	Insufficient Documentation	53
Documentation to support medical necessity - Missing	Insufficient Documentation	45
Documentation for the billed date of service- Missing	Insufficient Documentation	33
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	31
Documentation to support the laboratory completed a majority of COVID testing (during the prior calendar month) in 2 calendar days or less from when the specimen was collected – Missing*	Insufficient Documentation	26
Result of the diagnostic or laboratory test - Missing	Insufficient Documentation	20
Documentation for the associated diagnostic lab test(s) - Inadequate	Insufficient Documentation	18
Service code billed is changed to the service provided and/or ordered*	Incorrect Coding	16
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Inpatient Rehabilitation Facilities

Inpatient Rehabilitation Facilities (IRF) is defined as all services with a provider type of Inpatient Rehabilitation Hospitals or Inpatient Rehab Unit. The projected improper payment amount for IRF services during the 2023 report period was $1.9 billion, resulting in an improper payment rate of 27.3 percent.

Table 3: Top Root Causes for Inpatient Rehabilitation Facilities

Root Cause Description	Error Category	Sample Claim Count
Documentation does not support medical necessity for the service or item billed	Medical Necessity	157

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 2023 report period was $1.3 billion, resulting in an improper payment rate of 5.4 percent.

Table 4: Top Root Causes for Hospice

Root Cause Description	Error Category	Sample Claim Count
Service intensity add-on (SIA) services documentation – Missing*	Insufficient Documentation	27
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	19
Units of service (UOS) incorrectly coded – Downcode*	Incorrect Coding	10
Units of service (UOS) incorrectly coded – Upcode*	Incorrect Coding	10
Beneficiary election form - Inadequate	Insufficient Documentation	8
Physician certification was signed and dated after the claim was submitted	Other	6
Face to face documentation - Inadequate	Insufficient Documentation	5
Face to face documentation - Missing	Insufficient Documentation	5
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

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 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	123
Documentation supports higher level of E/M service than what was billed*	Incorrect Coding	18
Documentation for the billed date of service - Inadequate	Insufficient Documentation	11
Attestation for unsigned documentation - Missing	Insufficient Documentation	6
Documentation for the billed date of service- Missing	Insufficient Documentation	5
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 6: 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	145
Documentation to support medical necessity - Missing	Insufficient Documentation	112
Order - Inadequate	Insufficient Documentation	100
Risk assessment for urine drug screen - Missing	Insufficient Documentation	86
Documentation to support frequency of billing - Missing	Insufficient Documentation	74
Result of the diagnostic or laboratory test - Missing	Insufficient Documentation	63
Level of risk for urine drug screen - Missing	Insufficient Documentation	61
Order - Missing	Insufficient Documentation	57
LCD/LCA requirements, other documentation required for payment - Missing	Insufficient Documentation	40
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	31

Table 7: Top Root Causes for Minor procedures - other (Medicare fee schedule)

Root Cause Description	Error Category	Sample Claim Count
Physical/Occupational/Speech Therapy - Certification/Recertification - Missing	Insufficient Documentation	40
Physical/Occupational/Speech Therapy - Plan of care - Missing	Insufficient Documentation	18
Documentation does not support medical necessity for the service or item billed	Medical Necessity	14
Physical/Occupational/Speech Therapy - Required progress report, performed at least once every 10 treatment days - Missing	Insufficient Documentation	12
Units of service (UOS) incorrectly coded – Upcode*	Incorrect Coding	12
Physical/Occupational/Speech Therapy - Reason for the delayed physician certification/recertification - Missing	Insufficient Documentation	11
LCD/LCA requirements, other documentation required for payment - Inadequate	Insufficient Documentation	11
LCD/LCA requirements, other documentation required for payment - Missing	Insufficient Documentation	11
Documentation to support medical necessity - Missing	Insufficient Documentation	10
Attestation for unsigned documentation - Missing	Insufficient Documentation	10
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

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 Surgical Dressings

Root Cause Description	Error Category	Sample Claim Count
Wound management documentation - Inadequate	Insufficient Documentation	94
Order - Missing	Insufficient Documentation	18
Units of service (UOS) ordered does not support the units of service (UOS) provided and billed*	Insufficient Documentation	17
Order - Inadequate	Insufficient Documentation	16
Wound management documentation - Missing	Insufficient Documentation	14
Units of service (UOS) incorrectly coded – Downcode*	Incorrect Coding	11
Proof of delivery - Missing	Insufficient Documentation	9
Refill request - Missing	Insufficient Documentation	9
Proof of delivery - Inadequate	Insufficient Documentation	8
Submitted order not written by provider listed on the claim as ordering/referring provider	Other	8
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 9: Top Root Causes for CPAP

Root Cause Description	Error Category	Sample Claim Count
Documentation to support continued medical need - Missing	Insufficient Documentation	57
Proof of delivery - Inadequate	Insufficient Documentation	38
Refill request - Missing	Insufficient Documentation	32
Submitted order not written by provider listed on the claim as ordering/referring provider	Other	22
Order - Missing	Insufficient Documentation	21
Order - Inadequate	Insufficient Documentation	20
Refill request - Inadequate	Insufficient Documentation	17
The date of delivery was not supported by the submitted documentation	Other	9
Proof of delivery - Missing	Insufficient Documentation	7

Table 10: Top Root Causes for Ventilators

Root Cause Description	Error Category	Sample Claim Count
Documentation to support continued medical need - Missing	Insufficient Documentation	20
Submitted order not written by provider listed on the claim as ordering/referring provider	Other	13

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 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	174
Discharge status incorrectly coded*	Incorrect Coding	14
Documentation to support medical necessity for the procedure – Missing*	Insufficient Documentation	11
Radiographs to support medical necessity for the billed surgical procedure(s) - Missing	Insufficient Documentation	6
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 12: 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	34
Discharge status incorrectly coded*	Incorrect Coding	6
NCD requirement(s), other documentation required for payment - Inadequate	Insufficient Documentation	5
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 13: Top Root Causes for Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)

Root Cause Description	Error Category	Sample Claim Count
Preoperative surgeon's office notes - Missing	Insufficient Documentation	22
Documentation to support medical necessity for the procedure – Missing*	Insufficient Documentation	21
Discharge status incorrectly coded*	Incorrect Coding	15
Procedure not medically necessary*	Medical Necessity	5
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

SUPPLEMENTAL STATISTICAL REPORTING

Appendix A: Summary of Projected Improper Payments Adjusted for A/B Rebill[7]

Table A1: 2023 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)	24,599	17,259	$304.8	$18.3	6.0%	5.4% - 6.6%	58.6%
Part A (Excluding Hospital IPPS)	9,736	8,506	$183.4	$14.2	7.8%	6.8% - 8.7%	45.5%
Part A (Hospital IPPS)	14,863	8,753	$121.4	$4.1	3.4%	3.0% - 3.8%	13.1%
Part B	12,303	12,001	$109.6	$11.0	10.0%	8.6% - 11.5%	35.2%
DMEPOS	8,408	8,248	$8.7	$1.9	22.5%	20.5% - 24.5%	6.2%
Total	**45,310**	**37,508**	**$423.0**	**$31.2**	**7.4%**	**6.8% - 7.9%**	**100.0%**

Table A2: Comparison of 2022 and 2023 Overall Improper Payment Rates by Error Category (Adjusted for Impact of A/B Rebilling)

Error Category	2022	2023				
	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	4.7%	4.6%	2.3%	0.3%	1.8%	0.3%
Medical Necessity	1.0%	1.1%	0.6%	0.4%	0.1%	0.0%
Incorrect Coding	0.8%	0.9%	0.1%	0.2%	0.5%	0.0%
Other	0.6%	0.5%	0.3%	0.0%	0.1%	0.1%
Total	**7.5%**	**7.4%**	**3.4%**	**1.0%**	**2.6%**	**0.5%**

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

Table A3: Improper Payment Rate Categories by Percentage of 2023 Overall Improper Payments (Adjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	3.7%
Insufficient Documentation	62.8%
Medical Necessity	15.0%
Incorrect Coding	11.6%
Other	6.9%
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)	$304.8	$18.3	6.0%	$17.5	5.8%	$0.7	0.2%
Part A (Excluding Hospital IPPS)	$183.4	$14.2	7.8%	$13.9	7.6%	$0.3	0.2%
Part A (Hospital IPPS)	$121.4	$4.1	3.4%	$3.7	3.0%	$0.4	0.3%
Part B	$109.6	$11.0	10.0%	$10.7	9.8%	$0.3	0.2%
DMEPOS	$8.7	$1.9	22.5%	$1.9	22.5%	$0.0	0.0%
Total	**$423.0**	**$31.2**	**7.4%**	**$30.2**	**7.1%**	**$1.0**	**0.2%**

Table A5: 2023 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	$0.3	$0.0	$0.2	$0.1	$0.4	$0.0	$0.1	$1.2
Insufficient Documentation	$1.1	$0.5	$5.2	$1.4	$5.6	$3.8	$2.0	$19.6
Medical Necessity	$0.1	$0.6	$0.1	$3.5	$0.0	$0.0	$0.3	$4.7
Incorrect Coding	$0.0	$0.0	$0.5	$0.9	$1.8	$0.1	$0.3	$3.6
Other	$0.4	$0.1	$0.1	$0.0	$0.4	$0.9	$0.1	$2.1
Total	**$1.9**	**$1.3**	**$6.1**	**$6.0**	**$8.3**	**$4.8**	**$2.8**	**$31.2**

Table A6: Summary of National Improper Payment Rates by Year and by Error Category (Adjusted for Impact of A/B Rebilling)[8]

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[9]	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[10]	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[11]	Gross	0.2%	4.3%	3.0%	1.0%	0.1%	8.6%	91.4%
2012[12]	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%
2023	Gross	0.3%	4.6%	1.1%	0.9%	0.5%	7.38%	92.62%

[8] 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.
[9] FY 1996-2003 Improper payments were calculated as Overpayments - Underpayments
[10] FY 2004-2023 Improper payments were calculated as Overpayments + Underpayments
[11] The FY 2011 improper payment rate reported in this table is adjusted for the prospective impact of late appeals and documentation.
[12] The FY 2012-2023 improper payment rates reported in this table are adjusted for the impact of denied Part A inpatient claims under Part B.

Table A7: 2023 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	8,248	$8.7	$1.9	22.5%	20.5% - 24.5%	6.2%
Home Health & Hospice	2,099	$40.2	$2.5	6.3%	5.1% - 7.6%	8.2%
Parts A & B (Excluding Home Health & Hospice)	27,161	$374.1	$26.7	7.1%	6.5% - 7.8%	85.6%
Total	**37,508**	**$423.0**	**$31.2**	**7.4%**	**6.8% - 7.9%**	**100.0%**

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

Table B1: 2023 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)	24,599	17,259	$304.8	$19.3	6.3%	5.7% - 6.9%	59.8%
Part A (Excluding Hospital IPPS)	9,736	8,506	$183.4	$14.2	7.8%	6.8% - 8.7%	44.1%
Part A (Hospital IPPS)	14,863	8,753	$121.4	$5.0	4.2%	3.7% - 4.6%	15.7%
Part B	12,303	12,001	$109.6	$11.0	10.0%	8.6% - 11.5%	34.1%
DMEPOS	8,408	8,248	$8.7	$1.9	22.5%	20.5% - 24.5%	6.0%
Total	**45,310**	**37,508**	**$423.0**	**$32.2**	**7.6%**	**7.0% - 8.2%**	**100.0%**

Table B2: Comparison of 2022 and 2023 Overall Improper Payment Rates by Error Category (Unadjusted for Impact of A/B Rebilling)

Error Category	2022	2023				
	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	4.7%	4.6%	2.3%	0.3%	1.8%	0.3%
Medical Necessity	1.2%	1.3%	0.6%	0.6%	0.1%	0.0%
Incorrect Coding	0.8%	0.9%	0.1%	0.2%	0.5%	0.0%
Other	0.6%	0.5%	0.3%	0.0%	0.1%	0.1%
Total	**7.6%**	**7.6%**	**3.4%**	**1.2%**	**2.6%**	**0.5%**

Table B3: Improper Payment Rate Categories by Percentage of 2023 Overall Improper Payments (Unadjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	3.6%
Insufficient Documentation	60.9%
Medical Necessity	17.6%
Incorrect Coding	11.3%
Other	6.7%
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)	$304.8	$19.3	6.3%	$18.5	6.1%	$0.7	0.2%
Part A (Excluding Hospital IPPS)	$183.4	$14.2	7.8%	$13.9	7.6%	$0.3	0.2%
Part A (Hospital IPPS)	$121.4	$5.0	4.2%	$4.6	3.8%	$0.4	0.3%
Part B	$109.6	$11.0	10.0%	$10.7	9.8%	$0.3	0.2%
DMEPOS	$8.7	$1.9	22.5%	$1.9	22.5%	$0.0	0.0%
Total	**$423.0**	**$32.2**	**7.6%**	**$31.2**	**7.4%**	**$1.0**	**0.2%**

Table B5: 2023 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	$0.0	$0.2	$0.1	$0.4	$0.0	$0.1	$1.2
Insufficient Documentation	$1.1	$0.5	$5.2	$1.4	$5.6	$3.8	$2.0	$19.6
Medical Necessity	$0.2	$0.6	$0.2	$4.5	$0.0	$0.0	$0.3	$5.7
Incorrect Coding	$0.0	$0.0	$0.5	$1.0	$1.8	$0.1	$0.3	$3.6
Other	$0.4	$0.1	$0.2	$0.1	$0.4	$0.9	$0.1	$2.1
Total	**$2.0**	**$1.3**	**$6.1**	**$7.0**	**$8.3**	**$4.8**	**$2.8**	**$32.2**

Table B6: Summary of National Improper Payment Rates by Year and by Error Category (Unadjusted for Impact of A/B Rebilling)[13]

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[14]	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[15]	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%
2023	Gross	0.3%	4.6%	1.3%	0.9%	0.5%	7.61%	92.39%

[13] 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.
[14] FY 1996-2003 Improper payments were calculated as Overpayments - Underpayments
[15] FY 2004-2023 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	**37,508**	**7.6%**	**$32.2**	**100.0%**
Overall Part A (Hospital IPPS)	**8,753**	**4.2%**	**$5.0**	**15.7%**
0 or 1 day	1,263	21.7%	$1.7	5.1%
2 days	1,355	8.3%	$1.1	3.3%
3 days	1,176	5.7%	$0.8	2.5%
4 days	1,031	3.5%	$0.5	1.4%
5 days	792	2.4%	$0.3	0.8%
More than 5 days	3,136	1.3%	$0.8	2.5%

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
FL	2,701	$3,481.4	10.9%	8.7% - 13.2%	10.8%
CA	3,979	$3,444.9	7.3%	5.4% - 9.1%	10.7%
TX	2,774	$3,016.9	9.5%	6.7% - 12.2%	9.4%
PA	1,676	$1,670.8	10.2%	7.3% - 13.0%	5.2%
NY	2,074	$1,539.8	5.3%	3.9% - 6.6%	4.8%
NJ	1,074	$1,248.0	9.4%	6.6% - 12.2%	3.9%
OH	1,412	$1,161.4	8.1%	6.1% - 10.1%	3.6%
GA	992	$924.8	8.7%	5.8% - 11.6%	2.9%
AL	540	$907.2	13.9%	1.9% - 25.9%	2.8%
NC	1,214	$896.1	7.3%	5.3% - 9.4%	2.8%
TN	990	$830.8	7.9%	5.6% - 10.2%	2.6%
IL	1,599	$817.4	5.2%	3.7% - 6.6%	2.5%
KY	588	$799.9	12.5%	8.0% - 17.0%	2.5%
MD	904	$718.4	5.6%	3.0% - 8.2%	2.2%
VA	930	$702.6	6.9%	5.0% - 8.8%	2.2%
WV	258	$681.1	23.6%	(5.0%) - 52.2%	2.1%
AR	469	$640.8	12.9%	6.4% - 19.4%	2.0%
AZ	777	$628.7	7.6%	5.2% - 9.9%	2.0%
LA	604	$580.7	9.2%	5.4% - 12.9%	1.8%
MA	1,027	$574.8	4.3%	2.2% - 6.3%	1.8%
MI	1,038	$550.9	4.6%	3.1% - 6.1%	1.7%
WA	705	$532.3	6.4%	4.0% - 8.8%	1.7%
SC	632	$507.5	9.1%	5.6% - 12.5%	1.6%
IN	758	$504.3	6.9%	3.4% - 10.5%	1.6%
OK	539	$500.1	9.6%	6.2% - 13.0%	1.6%
MS	438	$371.8	10.1%	5.8% - 14.5%	1.2%
NE	267	$360.3	13.6%	6.4% - 20.8%	1.1%
CO	532	$355.4	5.9%	2.7% - 9.2%	1.1%
MO	748	$351.7	4.4%	2.5% - 6.2%	1.1%
NV	303	$306.2	9.8%	5.8% - 13.9%	1.0%
NM	184	$303.6	18.0%	5.6% - 30.4%	0.9%
KS	502	$283.4	5.2%	2.5% - 7.9%	0.9%
OR	352	$235.1	5.4%	0.4% - 10.4%	0.7%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
MN	603	$210.0	3.0%	1.9% - 4.2%	0.7%
WI	614	$197.7	2.6%	1.4% - 3.7%	0.6%
IA	441	$173.5	3.8%	2.0% - 5.6%	0.5%
UT	259	$160.6	5.1%	1.3% - 8.9%	0.5%
ID	181	$126.6	8.6%	2.6% - 14.5%	0.4%
DE	172	$119.1	5.7%	1.5% - 9.9%	0.4%
NH	205	$112.0	6.1%	2.8% - 9.4%	0.4%
CT	312	$102.8	2.4%	0.8% - 3.9%	0.3%
HI	84	$81.9	7.8%	(0.0%) - 15.7%	0.3%
SD	165	$80.4	4.4%	(0.3%) - 9.0%	0.3%
MT	144	$75.9	7.1%	1.2% - 12.9%	0.2%
PR	48	$64.9	12.5%	0.3% - 24.7%	0.2%
WY	86	$52.5	5.4%	(2.5%) - 13.4%	0.2%
DC	83	$51.6	6.1%	1.3% - 10.8%	0.2%
ME	154	$50.5	2.8%	0.7% - 4.9%	0.2%
ND	129	$34.7	2.8%	0.6% - 5.0%	0.1%
RI	83	$27.5	3.3%	(0.1%) - 6.6%	0.1%
VT	84	$22.0	3.1%	(0.4%) - 6.6%	0.1%
AK	61	$5.3	0.6%	(0.2%) - 1.5%	0.0%
All States	**37,508**	**$32,200.9**	**7.6%**	**7.0% - 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
FL	1,969	$2,917.5	10.7%	8.3% - 13.2%	9.1%
CA	3,023	$2,695.2	6.7%	4.6% - 8.7%	8.4%
TX	1,886	$2,551.1	9.3%	6.2% - 12.5%	7.9%
PA	1,249	$1,590.2	10.7%	7.6% - 13.9%	4.9%
NY	1,578	$1,375.3	5.0%	3.6% - 6.4%	4.3%
NJ	781	$1,101.8	9.1%	6.1% - 12.1%	3.4%
OH	1,013	$990.3	8.2%	6.1% - 10.4%	3.1%
AL	386	$849.3	15.0%	1.2% - 28.8%	2.6%
GA	747	$846.6	9.1%	5.9% - 12.3%	2.6%
NC	853	$811.8	7.7%	5.4% - 10.0%	2.5%
TN	755	$759.4	8.1%	5.6% - 10.7%	2.4%
KY	405	$745.0	12.7%	7.9% - 17.6%	2.3%
MD	696	$681.9	5.5%	2.8% - 8.2%	2.1%
IL	1,122	$671.2	4.9%	3.3% - 6.4%	2.1%
WV	188	$660.4	24.4%	(5.8%) - 54.7%	2.1%
VA	674	$656.6	7.1%	5.0% - 9.1%	2.0%
AZ	585	$567.6	7.7%	5.1% - 10.3%	1.8%
AR	322	$538.6	12.6%	5.3% - 19.9%	1.7%
LA	395	$471.6	9.4%	5.0% - 13.8%	1.5%
SC	447	$469.8	9.7%	5.7% - 13.6%	1.5%
IN	537	$465.0	7.1%	3.2% - 11.1%	1.4%
MA	784	$460.7	3.7%	1.7% - 5.7%	1.4%
WA	517	$440.7	5.9%	3.5% - 8.2%	1.4%
MI	734	$405.1	3.8%	2.4% - 5.3%	1.3%
OK	366	$345.1	7.6%	4.6% - 10.5%	1.1%
CO	370	$320.8	6.0%	2.4% - 9.7%	1.0%
MO	543	$305.3	4.2%	2.2% - 6.2%	1.0%
NE	177	$286.4	12.0%	4.5% - 19.4%	0.9%
NM	116	$284.3	21.1%	6.1% - 36.1%	0.9%
KS	366	$231.8	4.6%	1.9% - 7.4%	0.7%
NV	232	$230.3	8.6%	4.4% - 12.9%	0.7%
MS	292	$228.3	7.2%	3.4% - 11.0%	0.7%
OR	240	$221.5	5.9%	0.2% - 11.7%	0.7%
MN	441	$187.3	3.0%	1.7% - 4.2%	0.6%
WI	436	$163.2	2.3%	1.1% - 3.5%	0.5%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
IA	303	$162.2	3.8%	1.9% - 5.7%	0.5%
UT	175	$141.4	5.3%	0.8% - 9.8%	0.4%
ID	122	$123.5	11.3%	3.3% - 19.2%	0.4%
DE	122	$111.5	5.8%	1.3% - 10.3%	0.4%
CT	229	$89.7	2.3%	0.6% - 3.9%	0.3%
NH	144	$81.2	5.5%	2.0% - 9.0%	0.3%
HI	70	$78.1	8.0%	(0.4%) - 16.3%	0.2%
MT	104	$66.9	6.8%	0.5% - 13.0%	0.2%
SD	127	$65.8	4.0%	(1.1%) - 9.0%	0.2%
PR	35	$59.6	13.8%	(0.9%) - 28.4%	0.2%
DC	60	$51.3	6.5%	1.3% - 11.7%	0.2%
ME	111	$47.0	3.0%	0.6% - 5.4%	0.2%
ND	95	$29.9	2.6%	0.3% - 4.8%	0.1%
RI	62	$25.5	3.5%	(0.4%) - 7.4%	0.1%
VT	62	$18.9	3.1%	(0.9%) - 7.2%	0.1%
AK	49	$5.2	0.7%	(0.2%) - 1.5%	0.0%
WY	50	$5.0	0.6%	(0.2%) - 1.3%	0.0%
All States	**27,161**	**$27,706.7**	**7.4%**	**6.8% - 8.0%**	**86.0%**

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	575	$290.2	37.0%	27.8% - 46.1%	0.9%
CA	694	$137.7	19.0%	14.2% - 23.9%	0.4%
TX	511	$126.4	21.6%	15.5% - 27.7%	0.4%
MI	250	$111.3	42.4%	20.7% - 64.0%	0.4%
NY	447	$102.3	26.2%	8.9% - 43.5%	0.3%
PA	375	$78.8	21.5%	10.7% - 32.3%	0.2%
IL	388	$71.9	17.9%	12.9% - 22.9%	0.2%
NC	301	$64.3	21.9%	14.7% - 29.1%	0.2%
NJ	256	$58.1	26.6%	16.4% - 36.8%	0.2%
MA	196	$55.6	23.8%	10.5% - 37.1%	0.2%
KY	167	$54.9	23.4%	12.4% - 34.3%	0.2%
TN	192	$54.1	23.2%	12.5% - 34.0%	0.2%
OH	309	$51.3	20.9%	14.0% - 27.8%	0.2%
LA	136	$47.1	34.6%	15.7% - 53.5%	0.2%
VA	212	$43.6	20.7%	11.7% - 29.7%	0.1%
GA	195	$39.1	21.1%	5.9% - 36.3%	0.1%
IN	193	$38.2	21.3%	13.9% - 28.7%	0.1%
SC	162	$37.5	19.9%	11.5% - 28.2%	0.1%
MS	125	$35.0	28.0%	14.0% - 42.1%	0.1%
AL	113	$34.1	29.5%	16.0% - 43.0%	0.1%
WA	159	$33.0	18.9%	9.2% - 28.6%	0.1%
WI	155	$31.6	29.7%	17.9% - 41.5%	0.1%
AR	122	$27.7	19.0%	9.4% - 28.6%	0.1%
AZ	165	$27.0	13.1%	5.7% - 20.6%	0.1%
MO	180	$25.8	14.9%	8.0% - 21.9%	0.1%
CO	141	$22.7	14.4%	6.2% - 22.5%	0.1%
OK	97	$22.3	18.3%	6.2% - 30.4%	0.1%
KS	117	$21.9	16.8%	7.9% - 25.8%	0.1%
MN	134	$21.5	14.9%	6.5% - 23.2%	0.1%
MD	193	$19.8	12.9%	6.8% - 19.0%	0.1%
NE	77	$19.6	22.7%	9.7% - 35.6%	0.1%
NH	50	$16.0	34.7%	16.0% - 53.4%	0.1%
UT	66	$14.3	19.3%	6.9% - 31.6%	0.0%
OR	93	$13.6	15.9%	5.7% - 26.0%	0.0%
CT	69	$13.2	23.5%	9.5% - 37.5%	0.0%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
NM	50	$12.4	21.5%	7.7% - 35.2%	0.0%
WV	64	$11.8	17.0%	5.2% - 28.8%	0.0%
IA	126	$11.4	10.5%	4.0% - 17.1%	0.0%
DE	47	$7.5	13.5%	1.2% - 25.8%	0.0%
MT	38	$7.5	14.9%	0.7% - 29.2%	0.0%
SD	31	$5.1	11.2%	(2.7%) - 25.1%	0.0%
ND	32	$4.6	11.1%	(1.3%) - 23.6%	0.0%
WY	33	$4.4	12.9%	(3.0%) - 28.8%	0.0%
ID	45	$3.1	8.0%	0.8% - 15.2%	0.0%
ME	37	$2.0	6.1%	(1.3%) - 13.4%	0.0%
NV	47	$1.9	2.9%	(1.7%) - 7.5%	0.0%
All States (Incl. States Not Listed)	**8,248**	**$1,947.5**	**22.5%**	**20.5% - 24.5%**	**6.1%**

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
CA	262	$612.0	10.1%	5.4% - 14.9%	1.9%
TX	377	$339.5	8.4%	5.2% - 11.7%	1.1%
FL	157	$273.8	7.1%	1.6% - 12.5%	0.9%
OK	76	$132.7	24.7%	7.4% - 42.0%	0.4%
OH	90	$119.8	5.8%	0.5% - 11.0%	0.4%
NJ	37	$88.1	9.3%	(0.5%) - 19.1%	0.3%
IL	89	$74.3	4.6%	(0.2%) - 9.3%	0.2%
NY	49	$62.2	5.8%	(0.3%) - 11.8%	0.2%
LA	73	$62.0	5.1%	(1.2%) - 11.4%	0.2%
MA	47	$58.5	6.7%	(2.6%) - 15.9%	0.2%
GA	50	$39.1	3.5%	(1.7%) - 8.6%	0.1%
MI	54	$34.5	2.7%	(0.3%) - 5.7%	0.1%
AL	41	$23.9	3.2%	(1.3%) - 7.8%	0.1%
NC	60	$19.9	1.4%	(1.4%) - 4.2%	0.1%
TN	43	$17.3	2.0%	(0.9%) - 4.8%	0.1%
VA	44	$2.4	0.3%	(0.3%) - 1.0%	0.0%
PA	52	$1.8	0.2%	(0.1%) - 0.4%	0.0%
All States (Incl. States Not Listed)	**2,099**	**$2,546.7**	**6.3%**	**5.1% - 7.6%**	**7.9%**

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	Improper Payment Rate	95% Confidence Interval
Radiation tx delivery imrt (G6015)	$365.0	29.7%	10.2% - 49.1%

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	
Office visits - established	$1,116,881,372	6.4%	5.2% - 7.6%	9.3%	17.3%	0.0%	70.7%	2.7%	3.5%
Lab tests - other (non-Medicare fee schedule)	$1,041,921,347	22.9%	19.4% - 26.3%	1.3%	94.1%	1.5%	0.2%	2.9%	3.2%
Minor procedures - other (Medicare fee schedule)	$819,762,199	15.1%	10.8% - 19.3%	2.2%	74.6%	2.6%	2.9%	17.7%	2.5%
Other drugs	$742,347,094	6.4%	(0.9%) - 13.8%	1.9%	89.6%	4.2%	2.3%	2.0%	2.3%
Specialist - other	$725,015,662	26.5%	20.2% - 32.8%	6.1%	76.7%	0.4%	5.3%	11.5%	2.3%
Hospital visit - subsequent	$661,117,934	12.9%	8.1% - 17.7%	2.5%	53.3%	0.0%	39.6%	4.6%	2.1%
Hospital visit - initial	$473,599,106	22.2%	19.4% - 24.9%	7.7%	25.6%	0.0%	62.5%	4.2%	1.5%
Ambulance	$421,830,079	10.8%	6.9% - 14.8%	5.2%	48.2%	42.2%	4.3%	0.0%	1.3%
Major procedure - Other	$354,155,312	8.2%	(6.8%) - 23.2%	0.0%	100.0%	0.0%	0.0%	0.0%	1.1%
Nursing home visit	$348,327,738	16.1%	11.8% - 20.4%	17.7%	41.5%	0.0%	33.4%	7.4%	1.1%
Oncology - radiation therapy	$331,231,063	36.3%	12.5% - 60.2%	1.2%	98.4%	0.0%	0.0%	0.4%	1.0%
Office visits - new	$319,432,777	9.4%	6.5% - 12.2%	3.6%	14.0%	0.0%	66.4%	15.9%	1.0%
Ambulatory procedures - skin	$250,549,621	10.3%	(1.1%) - 21.7%	0.0%	95.1%	0.0%	4.9%	0.0%	0.8%
Chiropractic	$214,123,439	39.3%	29.0% - 49.5%	5.4%	92.4%	0.6%	1.6%	0.0%	0.7%
Other tests - other	$212,625,465	13.6%	8.0% - 19.2%	4.2%	91.4%	3.4%	0.0%	1.0%	0.7%
Advanced imaging - CAT/CT/CTA: other	$205,196,406	15.3%	8.7% - 21.9%	7.9%	88.0%	1.3%	1.8%	0.9%	0.6%
Minor procedures - musculoskeletal	$201,295,802	19.4%	5.9% - 32.9%	0.9%	95.8%	0.0%	3.2%	0.1%	0.6%
Hospital visit - critical care	$188,342,835	17.3%	11.9% - 22.7%	9.7%	13.8%	0.0%	67.3%	9.1%	0.6%
Specialist - psychiatry	$186,055,660	13.5%	8.1% - 18.9%	7.6%	79.5%	0.1%	7.1%	5.8%	0.6%
Ambulatory procedures - other	$159,787,114	24.5%	14.2% - 34.9%	2.9%	95.1%	0.3%	0.0%	1.6%	0.5%
All Type of Services (Incl. Codes Not Listed)	**$10,988,112,586**	**10.0%**	**8.6% - 11.5%**	**5.0%**	**68.8%**	**2.4%**	**19.1%**	**4.7%**	**34.1%**

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	
Surgical Dressings	$262,611,125	62.1%	50.2% - 74.1%	44.1%	47.8%	1.7%	1.3%	5.0%	0.8%
CPAP	$157,518,140	15.0%	11.9% - 18.0%	0.5%	73.5%	1.6%	0.2%	24.2%	0.5%
Ventilators	$135,950,716	24.3%	16.2% - 32.4%	28.2%	46.2%	1.8%	0.0%	23.7%	0.4%
Urological Supplies	$116,587,196	28.1%	16.6% - 39.7%	0.0%	82.1%	1.6%	3.4%	12.8%	0.4%
Glucose Monitor	$103,199,765	13.5%	10.0% - 17.0%	8.6%	82.8%	4.9%	0.1%	3.6%	0.3%
All Policy Groups with Less than 30 Claims	$100,326,388	35.8%	20.9% - 50.7%	16.2%	53.8%	7.2%	1.3%	21.5%	0.3%
Lower Limb Orthoses	$92,013,669	36.6%	28.3% - 44.8%	35.3%	41.7%	7.8%	0.0%	15.3%	0.3%
Parenteral Nutrition	$86,363,169	37.1%	29.4% - 44.8%	0.3%	64.5%	9.4%	1.4%	24.3%	0.3%
Oxygen Supplies/Equipment	$82,708,468	11.4%	7.8% - 15.0%	3.2%	65.3%	0.0%	0.0%	31.5%	0.3%
Infusion Pumps & Related Drugs	$80,984,423	12.5%	6.9% - 18.2%	13.1%	58.2%	3.3%	2.6%	22.8%	0.3%
Nebulizers & Related Drugs	$69,487,411	13.2%	9.0% - 17.3%	2.9%	58.6%	22.7%	1.4%	14.4%	0.2%
Ostomy Supplies	$56,836,415	25.6%	17.7% - 33.5%	1.3%	83.8%	0.2%	0.1%	14.6%	0.2%
Wheelchairs Options/Accessories	$54,349,900	19.6%	9.6% - 29.6%	0.0%	33.0%	42.3%	0.0%	24.7%	0.2%
Oral Anti-Cancer Drugs	$48,939,965	84.0%	59.8% - 108.1%	0.0%	7.3%	0.0%	0.0%	92.7%	0.2%
Diabetic Shoes	$47,463,560	51.4%	35.9% - 66.8%	0.0%	84.6%	0.0%	0.0%	15.4%	0.1%
Enteral Nutrition	$43,246,587	28.7%	18.8% - 38.5%	0.6%	52.8%	30.6%	0.7%	15.4%	0.1%
Immunosuppressive Drugs	$43,190,520	15.7%	8.9% - 22.4%	0.2%	62.2%	14.7%	0.0%	22.9%	0.1%
Wheelchairs Manual	$42,783,319	42.6%	34.6% - 50.7%	0.0%	77.8%	0.0%	0.0%	22.2%	0.1%
LSO	$42,602,055	36.4%	27.1% - 45.8%	42.8%	29.6%	19.3%	0.0%	8.3%	0.1%
Pneumatic Compression Device	$41,580,669	78.9%	65.6% - 92.2%	0.0%	55.1%	41.2%	0.0%	3.7%	0.1%
All Type of Services (Incl. Codes Not Listed)	**$1,947,497,111**	**22.5%**	**20.5% - 24.5%**	**13.7%**	**58.2%**	**7.6%**	**0.8%**	**19.7%**	**6.0%**

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

Part A Excluding Hospital IPPS Services (TOB)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percentage of Service Type Improper Payments by Type of Error					Percent of Overall Improper Payments
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other	
SNF Inpatient	$4,752,469,358	14.9%	12.4% - 17.4%	0.2%	79.1%	0.2%	1.2%	19.4%	14.8%
Hospital Outpatient	$3,931,281,258	5.4%	3.6% - 7.2%	2.8%	88.4%	2.2%	6.2%	0.5%	12.2%
Hospital Inpatient (Part A)	$1,966,884,489	17.7%	14.2% - 21.2%	0.0%	6.2%	93.8%	0.0%	0.0%	6.1%
Home Health	$1,230,945,533	7.7%	5.9% - 9.4%	1.4%	38.6%	46.8%	2.8%	10.4%	3.8%
Nonhospital based hospice	$1,165,731,047	5.2%	3.3% - 7.0%	7.1%	80.7%	4.8%	0.5%	6.8%	3.6%
CAH	$466,486,942	6.8%	4.0% - 9.6%	0.3%	68.5%	0.9%	28.7%	1.7%	1.4%
Clinic ESRD	$204,605,640	2.1%	0.4% - 3.8%	0.0%	52.8%	0.0%	38.6%	8.6%	0.6%
Hospital based hospice	$127,383,669	8.2%	3.6% - 12.9%	11.4%	84.5%	0.0%	0.8%	3.3%	0.4%
Clinic OPT	$115,475,866	10.8%	2.5% - 19.1%	0.0%	83.0%	0.0%	3.1%	13.9%	0.4%
Clinical Rural Health	$64,083,657	3.6%	1.6% - 5.6%	0.0%	82.8%	0.0%	17.2%	0.0%	0.2%
FQHC	$60,839,466	5.3%	0.2% - 10.4%	0.0%	94.3%	0.0%	0.1%	5.5%	0.2%
SNF Inpatient Part B	$33,606,859	1.2%	0.1% - 2.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Hospital Other Part B	$31,864,073	5.0%	2.1% - 7.8%	0.0%	95.9%	0.0%	4.1%	0.0%	0.1%
All Codes With Less Than 30 Claims	$22,675,289	1.4%	(1.5%) - 4.3%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Clinic CORF	$14,278,364	53.5%	38.9% - 68.1%	0.0%	88.1%	0.0%	0.0%	11.9%	0.0%
Hospital Inpatient Part B	$14,060,165	0.8%	(0.1%) - 1.6%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
SNF Outpatient	$13,467,557	4.5%	0.2% - 8.7%	7.0%	86.6%	0.0%	0.0%	6.4%	0.0%
All Type of Services (Incl. Codes Not Listed)	**$14,216,139,233**	**7.8%**	**6.8% - 8.7%**	**1.7%**	**67.8%**	**18.1%**	**4.0%**	**8.4%**	**44.1%**

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)	$633,818,171	40.6%	35.1% - 46.2%	0.0%	8.7%	91.2%	0.1%	0.0%	2.0%
Percutaneous Intracardiac Procedures (273, 274)	$431,040,599	31.0%	20.0% - 42.1%	0.0%	87.0%	12.3%	0.7%	0.0%	1.3%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$321,105,091	11.2%	8.2% - 14.1%	1.9%	82.0%	13.8%	2.3%	0.0%	1.0%
Respiratory Infections & Inflammations (177, 178, 179)	$231,656,917	3.4%	0.1% - 6.6%	0.0%	51.4%	20.9%	27.7%	0.0%	0.7%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$165,998,818	9.9%	3.6% - 16.1%	0.0%	62.2%	32.5%	5.3%	0.0%	0.5%
Renal Failure (682, 683, 684)	$134,932,546	8.5%	1.9% - 15.0%	0.0%	0.0%	39.3%	27.5%	33.3%	0.4%
GI Hemorrhage (377, 378, 379)	$90,916,394	5.3%	(0.5%) - 11.1%	10.6%	6.2%	22.7%	60.6%	0.0%	0.3%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$84,142,339	0.9%	(0.1%) - 1.8%	47.9%	4.9%	0.0%	47.2%	0.0%	0.3%
Degenerative Nervous System Disorders (056, 057)	$79,193,568	10.5%	5.3% - 15.7%	0.0%	25.9%	67.2%	6.9%	0.0%	0.2%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	$74,645,730	2.1%	0.2% - 4.0%	0.0%	24.2%	0.0%	75.8%	0.0%	0.2%
Other Disorders Of Nervous System (091, 092, 093)	$70,850,249	18.1%	7.0% - 29.3%	0.0%	0.0%	97.3%	2.7%	0.0%	0.2%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$62,823,144	5.1%	0.3% - 9.8%	0.0%	24.3%	5.9%	69.8%	0.0%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	$55,024,135	18.7%	10.2% - 27.2%	0.0%	65.3%	33.6%	1.2%	0.0%	0.2%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	$54,499,746	19.9%	(3.0%) - 42.8%	0.0%	2.0%	93.2%	4.8%	0.0%	0.2%
Diabetes (637, 638, 639)	$54,133,305	7.7%	(1.2%) - 16.7%	0.0%	0.0%	48.3%	51.7%	0.0%	0.2%
Cervical Spinal Fusion (471, 472, 473)	$51,474,366	10.0%	(0.6%) - 20.6%	0.0%	49.1%	50.9%	0.0%	0.0%	0.2%
AMI, Discharged Alive (280, 281, 282)	$50,097,047	2.9%	(0.1%) - 5.8%	0.0%	0.0%	72.8%	27.2%	0.0%	0.2%
Stomach, Esophageal & Duodenal Proc (326, 327, 328)	$49,751,673	7.4%	(0.4%) - 15.1%	0.0%	24.3%	70.9%	4.8%	0.0%	0.2%
Other Kidney & Urinary Tract Diagnoses (698, 699, 700)	$48,332,889	4.2%	(0.5%) - 8.9%	0.0%	0.0%	57.6%	42.4%	0.0%	0.2%
Kidney & Urinary Tract Infections (689, 690)	$48,281,348	3.8%	(0.8%) - 8.3%	0.0%	0.0%	87.3%	12.7%	0.0%	0.1%

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	
All Type of Services (Incl. Codes Not Listed)	**$5,049,136,325**	**4.2%**	**3.7% - 4.6%**	**2.1%**	**25.3%**	**52.9%**	**18.8%**	**0.9%**	**15.7%**

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	72.7%	57.8% - 87.7%	16.4%	79.5%	0.0%	4.1%	0.0%	0.1%
Other - Medicare fee schedule	41.1%	23.7% - 58.5%	19.2%	76.2%	0.0%	4.7%	0.0%	0.3%
Chiropractic	39.3%	29.0% - 49.5%	5.4%	92.4%	0.6%	1.6%	0.0%	0.7%
Oncology - radiation therapy	36.3%	12.5% - 60.2%	1.2%	98.4%	0.0%	0.0%	0.4%	1.0%
Standard imaging - other	27.2%	11.5% - 43.0%	0.0%	95.3%	0.0%	0.0%	4.7%	0.2%
Specialist - other	26.5%	20.2% - 32.8%	6.1%	76.7%	0.4%	5.3%	11.5%	2.3%
Ambulatory procedures - other	24.5%	14.2% - 34.9%	2.9%	95.1%	0.3%	0.0%	1.6%	0.5%
Echography/ultrasonography - carotid arteries	23.7%	8.2% - 39.2%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Lab tests - other (non-Medicare fee schedule)	22.9%	19.4% - 26.3%	1.3%	94.1%	1.5%	0.2%	2.9%	3.2%
Hospital visit - initial	22.2%	19.4% - 24.9%	7.7%	25.6%	0.0%	62.5%	4.2%	1.5%
Imaging/procedure - other	22.1%	(0.4%) - 44.6%	31.9%	68.1%	0.0%	0.0%	0.0%	0.2%
Lab tests - urinalysis	20.2%	10.8% - 29.7%	0.0%	92.9%	0.0%	0.0%	7.1%	0.0%
Minor procedures - musculoskeletal	19.4%	5.9% - 32.9%	0.9%	95.8%	0.0%	3.2%	0.1%	0.6%
Echography/ultrasonography - other	18.8%	5.0% - 32.5%	0.0%	97.4%	2.6%	0.0%	0.0%	0.3%
Lab tests - blood counts	18.6%	12.7% - 24.4%	4.1%	92.2%	0.0%	0.3%	3.5%	0.1%
Hospital visit - critical care	17.3%	11.9% - 22.7%	9.7%	13.8%	0.0%	67.3%	9.1%	0.6%
Nursing home visit	16.1%	11.8% - 20.4%	17.7%	41.5%	0.0%	33.4%	7.4%	1.1%
Advanced imaging - CAT/CT/CTA: other	15.3%	8.7% - 21.9%	7.9%	88.0%	1.3%	1.8%	0.9%	0.6%
Lab tests - bacterial cultures	15.1%	0.9% - 29.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Minor procedures - other (Medicare fee schedule)	15.1%	10.8% - 19.3%	2.2%	74.6%	2.6%	2.9%	17.7%	2.5%
Overall (incl. Service Types Not Listed)	**10.0%**	**8.6% - 11.5%**	**5.0%**	**68.8%**	**2.4%**	**19.1%**	**4.7%**	**34.1%**

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	
Orthopedic Footwear	100.0%	100.0% - 100.0%	9.3%	84.5%	0.9%	0.0%	5.3%	0.0%
Oral Anti-Cancer Drugs	84.0%	59.8% - 108.1%	0.0%	7.3%	0.0%	0.0%	92.7%	0.2%
Pneumatic Compression Device	78.9%	65.6% - 92.2%	0.0%	55.1%	41.2%	0.0%	3.7%	0.1%
Lenses	70.7%	55.5% - 85.8%	2.5%	43.1%	27.2%	0.0%	27.2%	0.1%
Surgical Dressings	62.1%	50.2% - 74.1%	44.1%	47.8%	1.7%	1.3%	5.0%	0.8%
Diabetic Shoes	51.4%	35.9% - 66.8%	0.0%	84.6%	0.0%	0.0%	15.4%	0.1%
Commodes/Bed Pans/Urinals	47.7%	30.9% - 64.4%	0.0%	52.9%	0.0%	0.0%	47.1%	0.0%
Wheelchairs Manual	42.6%	34.6% - 50.7%	0.0%	77.8%	0.0%	0.0%	22.2%	0.1%
Upper Limb Orthoses	40.9%	33.1% - 48.8%	31.1%	50.8%	5.7%	0.0%	12.4%	0.1%
Parenteral Nutrition	37.1%	29.4% - 44.8%	0.3%	64.5%	9.4%	1.4%	24.3%	0.3%
Lower Limb Orthoses	36.6%	28.3% - 44.8%	35.3%	41.7%	7.8%	0.0%	15.3%	0.3%
LSO	36.4%	27.1% - 45.8%	42.8%	29.6%	19.3%	0.0%	8.3%	0.1%
All Policy Groups with Less than 30 Claims	35.8%	20.9% - 50.7%	16.2%	53.8%	7.2%	1.3%	21.5%	0.3%
Repairs/DMEPOS	33.3%	18.0% - 48.6%	0.0%	19.0%	0.0%	62.2%	18.9%	0.0%
Hospital Beds/Accessories	30.1%	17.6% - 42.6%	0.0%	68.4%	8.9%	1.5%	21.2%	0.1%
Wheelchairs Seating	29.2%	14.3% - 44.0%	0.0%	24.4%	57.2%	0.0%	18.4%	0.0%
Enteral Nutrition	28.7%	18.8% - 38.5%	0.6%	52.8%	30.6%	0.7%	15.4%	0.1%
Urological Supplies	28.1%	16.6% - 39.7%	0.0%	82.1%	1.6%	3.4%	12.8%	0.4%
Suction Pump	26.1%	10.7% - 41.4%	0.0%	72.4%	14.7%	0.0%	12.9%	0.0%
Ostomy Supplies	25.6%	17.7% - 33.5%	1.3%	83.8%	0.2%	0.1%	14.6%	0.2%
Overall (incl. Service Types Not Listed)	**22.5%**	**20.5% - 24.5%**	**13.7%**	**58.2%**	**7.6%**	**0.8%**	**19.7%**	**6.0%**

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

Part A Excluding Hospital IPPS Services (TOB)	Improper Payment Rate	95% Confidence Interval	Percentage of Service Type Improper Payments by Type of Error					Percent of Overall Improper Payments
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other	
Clinic CORF	53.5%	38.9% - 68.1%	0.0%	88.1%	0.0%	0.0%	11.9%	0.0%
Hospital Inpatient (Part A)	17.7%	14.2% - 21.2%	0.0%	6.2%	93.8%	0.0%	0.0%	6.1%
SNF Inpatient	14.9%	12.4% - 17.4%	0.2%	79.1%	0.2%	1.2%	19.4%	14.8%
Clinic OPT	10.8%	2.5% - 19.1%	0.0%	83.0%	0.0%	3.1%	13.9%	0.4%
Hospital based hospice	8.2%	3.6% - 12.9%	11.4%	84.5%	0.0%	0.8%	3.3%	0.4%
Home Health	7.7%	5.9% - 9.4%	1.4%	38.6%	46.8%	2.8%	10.4%	3.8%
CAH	6.8%	4.0% - 9.6%	0.3%	68.5%	0.9%	28.7%	1.7%	1.4%
Hospital Outpatient	5.4%	3.6% - 7.2%	2.8%	88.4%	2.2%	6.2%	0.5%	12.2%
FQHC	5.3%	0.2% - 10.4%	0.0%	94.3%	0.0%	0.1%	5.5%	0.2%
Nonhospital based hospice	5.2%	3.3% - 7.0%	7.1%	80.7%	4.8%	0.5%	6.8%	3.6%
Hospital Other Part B	5.0%	2.1% - 7.8%	0.0%	95.9%	0.0%	4.1%	0.0%	0.1%
SNF Outpatient	4.5%	0.2% - 8.7%	7.0%	86.6%	0.0%	0.0%	6.4%	0.0%
Clinical Rural Health	3.6%	1.6% - 5.6%	0.0%	82.8%	0.0%	17.2%	0.0%	0.2%
Clinic ESRD	2.1%	0.4% - 3.8%	0.0%	52.8%	0.0%	38.6%	8.6%	0.6%
All Codes With Less Than 30 Claims	1.4%	(1.5%) - 4.3%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
SNF Inpatient Part B	1.2%	0.1% - 2.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Hospital Inpatient Part B	0.8%	(0.1%) - 1.6%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Overall (incl. Service Types Not Listed)	**7.8%**	**6.8% - 8.7%**	**1.7%**	**67.8%**	**18.1%**	**4.0%**	**8.4%**	**44.1%**

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	
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	40.6%	35.1% - 46.2%	0.0%	8.7%	91.2%	0.1%	0.0%	2.0%
Percutaneous Intracardiac Procedures (273, 274)	31.0%	20.0% - 42.1%	0.0%	87.0%	12.3%	0.7%	0.0%	1.3%
Bilateral Or Multiple Major Joint Procs Of Lower Extremity (461, 462)	28.7%	18.0% - 39.4%	0.0%	5.6%	92.5%	2.0%	0.0%	0.1%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	19.9%	(3.0%) - 42.8%	0.0%	2.0%	93.2%	4.8%	0.0%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	18.7%	10.2% - 27.2%	0.0%	65.3%	33.6%	1.2%	0.0%	0.2%
Other Disorders Of Nervous System (091, 092, 093)	18.1%	7.0% - 29.3%	0.0%	0.0%	97.3%	2.7%	0.0%	0.2%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	16.1%	2.1% - 30.1%	0.0%	37.1%	59.5%	3.3%	0.0%	0.1%
Female Reproductive System Reconstructive Procedures (748)	15.9%	5.1% - 26.8%	0.0%	12.7%	87.3%	0.0%	0.0%	0.0%
Aftercare (949, 950)	15.1%	3.9% - 26.4%	7.0%	21.0%	68.7%	3.3%	0.0%	0.0%
Signs & Symptoms (947, 948)	14.7%	6.1% - 23.3%	0.0%	7.7%	88.8%	3.5%	0.0%	0.1%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	14.4%	9.4% - 19.4%	2.8%	5.3%	83.9%	7.4%	0.6%	0.1%
Major Joint/Limb Reattachment Procedure Of Upper Extremities (483)	12.9%	0.7% - 25.2%	29.6%	49.1%	21.3%	0.0%	0.0%	0.1%
Fractures Of Hip & Pelvis (535, 536)	11.3%	3.2% - 19.4%	0.0%	0.0%	79.8%	20.2%	0.0%	0.1%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	11.2%	8.2% - 14.1%	1.9%	82.0%	13.8%	2.3%	0.0%	1.0%
Degenerative Nervous System Disorders (056, 057)	10.5%	5.3% - 15.7%	0.0%	25.9%	67.2%	6.9%	0.0%	0.2%
Cervical Spinal Fusion (471, 472, 473)	10.0%	(0.6%) - 20.6%	0.0%	49.1%	50.9%	0.0%	0.0%	0.2%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	9.9%	3.6% - 16.1%	0.0%	62.2%	32.5%	5.3%	0.0%	0.5%
Fx, Sprn, Strn & Disl Except Femur, Hip, Pelvis & Thigh (562, 563)	9.7%	(0.4%) - 19.8%	0.0%	0.0%	90.7%	9.3%	0.0%	0.0%
Renal Failure (682, 683, 684)	8.5%	1.9% - 15.0%	0.0%	0.0%	39.3%	27.5%	33.3%	0.4%
Organic Disturbances & Intellectual Disability (884)	8.3%	(0.8%) - 17.4%	0.0%	0.0%	97.1%	2.9%	0.0%	0.1%

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	
Overall (incl. Service Types Not Listed)	**4.2%**	**3.7% - 4.6%**	**2.1%**	**25.3%**	**52.9%**	**18.8%**	**0.9%**	**15.7%**

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
Surgical Dressings	$115,796,910	27.4%	13.0% - 41.8%	0.4%
Hospital Outpatient	$108,690,519	0.1%	(0.1%) - 0.4%	0.3%
Office visits - established	$103,952,114	0.6%	0.0% - 1.2%	0.3%
Nonhospital based hospice	$82,773,877	0.4%	(0.1%) - 0.9%	0.3%
Nursing home visit	$61,649,758	2.8%	0.2% - 5.5%	0.2%
Specialist - other	$44,223,221	1.6%	(0.4%) - 3.6%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$40,322,875	0.4%	(0.4%) - 1.2%	0.1%
Advanced imaging - MRI/MRA: other	$38,717,094	3.1%	(3.0%) - 9.1%	0.1%
Ventilators	$38,375,878	6.9%	(1.0%) - 14.7%	0.1%
Hospital visit - initial	$36,283,132	1.7%	0.6% - 2.8%	0.1%
Lower Limb Orthoses	$32,489,208	12.9%	7.1% - 18.7%	0.1%
Ambulance	$21,885,002	0.6%	(0.5%) - 1.7%	0.1%
Minor procedures - other (Medicare fee schedule)	$18,399,895	0.3%	(0.1%) - 0.8%	0.1%
Hospital visit - critical care	$18,289,116	1.7%	(0.3%) - 3.7%	0.1%
LSO	$18,241,569	15.6%	9.9% - 21.4%	0.1%
Home Health	$17,507,801	0.1%	(0.1%) - 0.3%	0.1%
Other - Medicare fee schedule	$17,339,617	7.9%	(5.6%) - 21.3%	0.1%
Hospital visit - subsequent	$16,817,188	0.3%	0.0% - 0.6%	0.1%
Advanced imaging - CAT/CT/CTA: other	$16,300,395	1.2%	(1.2%) - 3.6%	0.1%
All Policy Groups with Less than 30 Claims	$16,292,290	5.8%	2.1% - 9.5%	0.1%
Overall (Incl. Codes Not Listed)	**$1,159,297,949**	**0.3%**	**0.2% - 0.3%**	**3.6%**

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	$3,757,144,883	11.8%	9.6% - 14.0%	11.7%
Hospital Outpatient	$3,474,230,849	4.8%	3.0% - 6.6%	10.8%
Lab tests - other (non-Medicare fee schedule)	$980,630,266	21.5%	18.1% - 24.9%	3.0%
Nonhospital based hospice	$941,316,860	4.2%	2.5% - 5.9%	2.9%
Other drugs	$665,460,681	5.8%	(1.6%) - 13.1%	2.1%
Minor procedures - other (Medicare fee schedule)	$611,841,955	11.3%	7.8% - 14.7%	1.9%
Specialist - other	$555,860,146	20.3%	14.8% - 25.9%	1.7%
Home Health	$475,487,013	3.0%	1.5% - 4.4%	1.5%
Percutaneous Intracardiac Procedures (273, 274)	$374,852,913	27.0%	16.8% - 37.2%	1.2%
Major procedure - Other	$354,133,665	8.2%	(6.8%) - 23.2%	1.1%
Hospital visit - subsequent	$352,048,988	6.9%	2.0% - 11.8%	1.1%
Oncology - radiation therapy	$325,885,356	35.7%	11.8% - 59.7%	1.0%
CAH	$319,376,909	4.7%	2.5% - 6.8%	1.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$263,350,930	9.2%	6.4% - 11.9%	0.8%
Ambulatory procedures - skin	$238,372,804	9.8%	(1.7%) - 21.3%	0.7%
Ambulance	$203,486,138	5.2%	2.2% - 8.2%	0.6%
Chiropractic	$197,770,265	36.3%	26.1% - 46.5%	0.6%
Other tests - other	$194,339,974	12.4%	7.0% - 17.9%	0.6%
Office visits - established	$193,020,903	1.1%	0.5% - 1.7%	0.6%
Minor procedures - musculoskeletal	$192,883,713	18.6%	5.1% - 32.1%	0.6%
Overall (Incl. Codes Not Listed)	**$19,612,324,668**	**4.6%**	**4.1% - 5.1%**	**60.9%**

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

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Hospital Inpatient (Part A)	$1,845,179,563	16.6%	13.2% - 20.0%	5.7%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	$578,080,061	37.1%	31.6% - 42.6%	1.8%
Home Health	$575,674,746	3.6%	2.7% - 4.5%	1.8%
Ambulance	$178,145,668	4.6%	2.0% - 7.1%	0.6%
Hospital Outpatient	$85,866,104	0.1%	0.0% - 0.2%	0.3%
Other Disorders Of Nervous System (091, 092, 093)	$68,959,005	17.6%	6.5% - 28.8%	0.2%
Nonhospital based hospice	$56,397,817	0.2%	(0.1%) - 0.6%	0.2%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$54,016,908	3.2%	(0.6%) - 7.0%	0.2%
Degenerative Nervous System Disorders (056, 057)	$53,203,062	7.1%	2.7% - 11.4%	0.2%
Percutaneous Intracardiac Procedures (273, 274)	$53,054,302	3.8%	(2.5%) - 10.2%	0.2%
Renal Failure (682, 683, 684)	$52,967,291	3.3%	0.2% - 6.4%	0.2%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	$50,802,089	18.6%	(4.5%) - 41.6%	0.2%
Respiratory Infections & Inflammations (177, 178, 179)	$48,307,374	0.7%	(0.0%) - 1.4%	0.2%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$44,411,424	1.5%	0.4% - 2.7%	0.1%
Other Major Cardiovascular Procedures (270, 271, 272)	$44,397,137	3.3%	(2.9%) - 9.5%	0.1%
Organic Disturbances & Intellectual Disability (884)	$43,466,041	8.0%	(1.0%) - 17.1%	0.1%
Circulatory Disorders Except AMI, W Card Cath (286, 287)	$42,173,232	4.1%	0.0% - 8.2%	0.1%
Kidney & Urinary Tract Infections (689, 690)	$42,149,862	3.3%	(1.2%) - 7.8%	0.1%
Other Digestive System Diagnoses (393, 394, 395)	$38,954,379	7.7%	0.3% - 15.1%	0.1%
Psychoses (885)	$36,591,817	1.3%	(0.9%) - 3.6%	0.1%
Overall (Incl. Codes Not Listed)	**$5,658,234,587**	**1.3%**	**1.2% - 1.5%**	**17.6%**

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	$789,449,618	4.5%	3.7% - 5.3%	2.5%
Hospital visit - initial	$296,224,511	13.9%	12.0% - 15.7%	0.9%
Hospital visit - subsequent	$261,590,989	5.1%	4.1% - 6.1%	0.8%
Hospital Outpatient	$243,389,204	0.3%	(0.0%) - 0.7%	0.8%
Office visits - new	$212,145,051	6.2%	4.4% - 8.1%	0.7%
CAH	$133,831,775	1.9%	0.1% - 3.8%	0.4%
Hospital visit - critical care	$126,766,021	11.7%	6.5% - 16.8%	0.4%
Nursing home visit	$116,302,324	5.4%	3.7% - 7.0%	0.4%
Emergency room visit	$101,378,549	5.8%	4.0% - 7.6%	0.3%
Clinic ESRD	$78,888,824	0.8%	(0.6%) - 2.2%	0.2%
Respiratory Infections & Inflammations (177, 178, 179)	$64,166,119	0.9%	(0.4%) - 2.2%	0.2%
SNF Inpatient	$57,101,580	0.2%	(0.1%) - 0.4%	0.2%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	$56,584,378	1.6%	(0.0%) - 3.3%	0.2%
GI Hemorrhage (377, 378, 379)	$55,087,961	3.2%	(2.3%) - 8.7%	0.2%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$43,860,507	3.5%	(1.0%) - 8.1%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$39,711,156	0.4%	(0.0%) - 0.9%	0.1%
Specialist - other	$38,430,758	1.4%	(0.0%) - 2.8%	0.1%
Renal Failure (682, 683, 684)	$37,078,836	2.3%	(0.2%) - 4.9%	0.1%
Home Health	$34,629,089	0.2%	(0.1%) - 0.5%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$33,610,864	1.8%	0.0% - 3.6%	0.1%
Overall (Incl. Codes Not Listed)	**$3,629,058,073**	**0.9%**	**0.7% - 1.0%**	**11.3%**

Table F5: Top 20 Types of Services with Downcoding[16] Errors

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Hospital Outpatient	$190,640,586	0.3%	(0.1%) - 0.6%	0.6%
Office visits - established	$116,074,627	0.7%	0.2% - 1.1%	0.4%
Clinic ESRD	$78,799,152	0.8%	(0.6%) - 2.2%	0.2%
GI Hemorrhage (377, 378, 379)	$55,087,961	3.2%	(2.3%) - 8.7%	0.2%
CAH	$45,346,321	0.7%	(0.2%) - 1.6%	0.1%
Hospital visit - subsequent	$30,286,270	0.6%	0.1% - 1.1%	0.1%
Diabetes (637, 638, 639)	$28,011,675	4.0%	(1.5%) - 9.6%	0.1%
Respiratory System Diagnosis W Ventilator Support <=96 Hours (208)	$27,629,157	2.7%	(2.5%) - 7.9%	0.1%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$24,847,614	0.3%	(0.1%) - 0.6%	0.1%
Office visits - new	$24,741,691	0.7%	(0.1%) - 1.6%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$22,526,119	1.2%	(0.1%) - 2.6%	0.1%
Renal Failure (682, 683, 684)	$21,879,895	1.4%	(0.4%) - 3.2%	0.1%
Respiratory Infections & Inflammations (177, 178, 179)	$17,286,425	0.3%	(0.1%) - 0.6%	0.1%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	$15,218,470	0.7%	(0.3%) - 1.6%	0.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath (219, 220, 221)	$14,114,091	1.2%	(0.7%) - 3.0%	0.0%
Simple Pneumonia & Pleurisy (193, 194, 195)	$12,525,571	0.9%	(0.2%) - 2.0%	0.0%
AMI, Discharged Alive (280, 281, 282)	$11,717,837	0.7%	(0.7%) - 2.0%	0.0%
Minor procedures - other (Medicare fee schedule)	$11,182,875	0.2%	(0.2%) - 0.6%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391, 392)	$10,579,035	1.0%	(1.0%) - 3.0%	0.0%
Specialist - psychiatry	$10,330,545	0.8%	(0.4%) - 1.9%	0.0%
Overall (Incl. Codes Not Listed)	**$992,832,290**	**0.2%**	**0.2% - 0.3%**	**3.1%**

[16] 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	$919,663,056	2.9%	1.6% - 4.2%	2.9%
Minor procedures - other (Medicare fee schedule)	$144,777,767	2.7%	0.0% - 5.3%	0.4%
Home Health	$127,646,885	0.8%	0.2% - 1.4%	0.4%
Specialist - other	$83,575,411	3.1%	0.0% - 6.1%	0.3%
Nonhospital based hospice	$79,592,729	0.4%	(0.0%) - 0.7%	0.2%
Office visits - new	$50,905,107	1.5%	(0.3%) - 3.3%	0.2%
Oral Anti-Cancer Drugs	$45,380,520	77.9%	44.8% - 110.9%	0.1%
Renal Failure (682, 683, 684)	$44,886,419	2.8%	(2.6%) - 8.2%	0.1%
CPAP	$38,137,558	3.6%	2.0% - 5.3%	0.1%
Ventilators	$32,278,603	5.8%	2.8% - 8.7%	0.1%
Hospital visit - subsequent	$30,660,769	0.6%	(0.1%) - 1.3%	0.1%
Office visits - established	$30,458,737	0.2%	(0.1%) - 0.4%	0.1%
Lab tests - other (non-Medicare fee schedule)	$30,090,397	0.7%	0.2% - 1.1%	0.1%
Oxygen Supplies/Equipment	$26,053,122	3.6%	1.4% - 5.8%	0.1%
Nursing home visit	$25,673,873	1.2%	(0.2%) - 2.5%	0.1%
Automatic External Defibrillator	$24,850,275	16.5%	4.9% - 28.1%	0.1%
Lab tests - other (Medicare fee schedule)	$21,959,521	1.4%	(0.6%) - 3.5%	0.1%
All Policy Groups with Less than 30 Claims	$21,560,429	7.7%	2.6% - 12.8%	0.1%
Parenteral Nutrition	$20,992,717	9.0%	4.8% - 13.2%	0.1%
Hospital visit - initial	$19,734,917	0.9%	0.2% - 1.6%	0.1%
Overall (Incl. Codes Not Listed)	**$2,141,969,977**	**0.5%**	**0.4% - 0.6%**	**6.7%**

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
Office visits - established	955	$1,116,881,372	6.4%	5.2% - 7.6%	3.5%
Lab tests - other (non-Medicare fee schedule)	1,774	$1,041,921,347	22.9%	19.4% - 26.3%	3.2%
Minor procedures - other (Medicare fee schedule)	1,370	$819,762,199	15.1%	10.8% - 19.3%	2.5%
Other drugs	1,187	$742,347,094	6.4%	(0.9%) - 13.8%	2.3%
Specialist - other	972	$725,015,662	26.5%	20.2% - 32.8%	2.3%
Hospital visit - subsequent	728	$661,117,934	12.9%	8.1% - 17.7%	2.1%
Hospital visit - initial	558	$473,599,106	22.2%	19.4% - 24.9%	1.5%
Ambulance	362	$421,830,079	10.8%	6.9% - 14.8%	1.3%
Major procedure - Other	213	$354,155,312	8.2%	(6.8%) - 23.2%	1.1%
Nursing home visit	469	$348,327,738	16.1%	11.8% - 20.4%	1.1%
Oncology - radiation therapy	108	$331,231,063	36.3%	12.5% - 60.2%	1.0%
Office visits - new	263	$319,432,777	9.4%	6.5% - 12.2%	1.0%
All Codes With Less Than 30 Claims	1,097	$312,555,735	2.3%	1.1% - 3.6%	1.0%
Ambulatory procedures - skin	243	$250,549,621	10.3%	(1.1%) - 21.7%	0.8%
Chiropractic	157	$214,123,439	39.3%	29.0% - 49.5%	0.7%
Other tests - other	687	$212,625,465	13.6%	8.0% - 19.2%	0.7%
Advanced imaging - CAT/CT/CTA: other	263	$205,196,406	15.3%	8.7% - 21.9%	0.6%
Minor procedures - musculoskeletal	158	$201,295,802	19.4%	5.9% - 32.9%	0.6%
Hospital visit - critical care	212	$188,342,835	17.3%	11.9% - 22.7%	0.6%
Specialist - psychiatry	437	$186,055,660	13.5%	8.1% - 18.9%	0.6%
Ambulatory procedures - other	277	$159,787,114	24.5%	14.2% - 34.9%	0.5%
Eye procedure - other	109	$155,075,870	11.6%	(3.6%) - 26.9%	0.5%
Eye procedure - cataract removal/lens insertion	145	$149,241,566	8.2%	3.1% - 13.4%	0.5%
Emergency room visit	241	$132,720,969	7.6%	5.1% - 10.1%	0.4%
Advanced imaging - MRI/MRA: other	116	$120,916,587	9.6%	1.1% - 18.1%	0.4%
Anesthesia	173	$114,310,438	7.3%	1.0% - 13.5%	0.4%
Echography/ultrasonography - other	142	$96,278,253	18.8%	5.0% - 32.5%	0.3%
Other - Medicare fee schedule	185	$90,454,464	41.1%	23.7% - 58.5%	0.3%
Minor procedures - skin	186	$78,343,286	7.8%	3.2% - 12.5%	0.2%
Dialysis services (Medicare Fee Schedule)	87	$72,734,794	8.4%	(0.8%) - 17.5%	0.2%
Specialist - ophthalmology	154	$72,517,422	3.8%	0.8% - 6.8%	0.2%
Standard imaging - nuclear medicine	225	$70,831,067	7.8%	2.5% - 13.1%	0.2%

Part B Services (BETOS Codes)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Standard imaging - other	98	$67,535,807	27.2%	11.5% - 43.0%	0.2%
Lab tests - other (Medicare fee schedule)	202	$62,957,630	4.1%	0.6% - 7.6%	0.2%
Endoscopy - colonoscopy	81	$52,985,213	6.5%	(3.6%) - 16.6%	0.2%
Imaging/procedure - other	161	$48,886,884	22.1%	(0.4%) - 44.6%	0.2%
Standard imaging - musculoskeletal	170	$45,207,465	9.0%	3.6% - 14.4%	0.1%
Lab tests - blood counts	284	$37,717,431	18.6%	12.7% - 24.4%	0.1%
Echography/ultrasonography - carotid arteries	71	$36,405,913	23.7%	8.2% - 39.2%	0.1%
Lab tests - automated general profiles	252	$35,808,787	12.8%	7.7% - 17.9%	0.1%
Standard imaging - chest	135	$29,364,731	12.8%	5.2% - 20.5%	0.1%
Other - non-Medicare fee schedule	93	$27,970,321	72.7%	57.8% - 87.7%	0.1%
Standard imaging - breast	76	$23,596,950	4.0%	(1.1%) - 9.1%	0.1%
Other tests - electrocardiograms	245	$23,206,031	9.1%	4.5% - 13.7%	0.1%
Advanced imaging - CAT/CT/CTA: brain/head/neck	46	$13,437,063	3.9%	(1.7%) - 9.4%	0.0%
Lab tests - routine venipuncture (non-Medicare fee schedule	341	$12,843,865	12.9%	8.4% - 17.4%	0.0%
Echography/ultrasonography - heart	153	$9,813,110	1.5%	(0.5%) - 3.4%	0.0%
Lab tests - bacterial cultures	40	$9,562,347	15.1%	0.9% - 29.4%	0.0%
Lab tests - urinalysis	105	$6,834,258	20.2%	10.8% - 29.7%	0.0%
Undefined codes	410	$4,158,411	1.6%	0.0% - 3.1%	0.0%
Immunizations/Vaccinations	365	$241,894	0.0%	(0.0%) - 0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	**12,001**	**$10,988,112,586**	**10.0%**	**8.6% - 11.5%**	**34.1%**

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
Surgical Dressings	370	$262,611,125	62.1%	50.2% - 74.1%	0.8%
CPAP	1,034	$157,518,140	15.0%	11.9% - 18.0%	0.5%
Ventilators	241	$135,950,716	24.3%	16.2% - 32.4%	0.4%
Urological Supplies	255	$116,587,196	28.1%	16.6% - 39.7%	0.4%
Glucose Monitor	791	$103,199,765	13.5%	10.0% - 17.0%	0.3%
All Policy Groups with Less than 30 Claims	295	$100,326,388	35.8%	20.9% - 50.7%	0.3%
Lower Limb Orthoses	432	$92,013,669	36.6%	28.3% - 44.8%	0.3%
Parenteral Nutrition	295	$86,363,169	37.1%	29.4% - 44.8%	0.3%
Oxygen Supplies/Equipment	480	$82,708,468	11.4%	7.8% - 15.0%	0.3%
Infusion Pumps & Related Drugs	396	$80,984,423	12.5%	6.9% - 18.2%	0.3%
Nebulizers & Related Drugs	804	$69,487,411	13.2%	9.0% - 17.3%	0.2%
Ostomy Supplies	233	$56,836,415	25.6%	17.7% - 33.5%	0.2%
Wheelchairs Options/Accessories	336	$54,349,900	19.6%	9.6% - 29.6%	0.2%
Oral Anti-Cancer Drugs	49	$48,939,965	84.0%	59.8% - 108.1%	0.2%
Diabetic Shoes	126	$47,463,560	51.4%	35.9% - 66.8%	0.1%
Enteral Nutrition	246	$43,246,587	28.7%	18.8% - 38.5%	0.1%
Immunosuppressive Drugs	376	$43,190,520	15.7%	8.9% - 22.4%	0.1%
Wheelchairs Manual	264	$42,783,319	42.6%	34.6% - 50.7%	0.1%
LSO	216	$42,602,055	36.4%	27.1% - 45.8%	0.1%
Pneumatic Compression Device	84	$41,580,669	78.9%	65.6% - 92.2%	0.1%
Upper Limb Orthoses	232	$41,576,093	40.9%	33.1% - 48.8%	0.1%
Intravenous Immune Globulin	138	$25,749,928	13.5%	4.8% - 22.1%	0.1%
Automatic External Defibrillator	38	$24,850,275	16.5%	4.9% - 28.1%	0.1%
Negative Pressure Wound Therapy	79	$23,382,800	25.4%	11.2% - 39.7%	0.1%
Lower Limb Prostheses	171	$20,668,386	6.0%	1.9% - 10.2%	0.1%
Hospital Beds/Accessories	103	$18,591,948	30.1%	17.6% - 42.6%	0.1%
Lenses	56	$16,103,713	70.7%	55.5% - 85.8%	0.1%
Wheelchairs Seating	162	$15,478,679	29.2%	14.3% - 44.0%	0.0%
Respiratory Assist Device	87	$8,921,648	9.9%	2.8% - 17.1%	0.0%
Walkers	77	$8,723,698	24.8%	11.5% - 38.2%	0.0%
Tracheostomy Supplies	65	$8,288,037	22.5%	9.6% - 35.5%	0.0%
Wheelchairs Motorized	101	$5,082,585	4.3%	(0.3%) - 9.0%	0.0%
Suction Pump	101	$4,623,583	26.1%	10.7% - 41.4%	0.0%
Commodes/Bed Pans/Urinals	72	$4,403,166	47.7%	30.9% - 64.4%	0.0%
Orthopedic Footwear	39	$4,347,018	100.0%	100.0% - 100.0%	0.0%
Repairs/DMEPOS	38	$2,535,586	33.3%	18.0% - 48.6%	0.0%
Other Neuromuscular Stimulators	40	$2,129,090	22.6%	9.4% - 35.7%	0.0%
HFCWO Device	40	$1,779,477	2.6%	(2.5%) - 7.7%	0.0%
Patient Lift	55	$1,517,941	10.9%	2.7% - 19.1%	0.0%

DMEPOS (Policy Group)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Misc Drugs	35	$0	0.0%	N/A	0.0%
Routinely Denied Items	128	$0	0.0%	N/A	0.0%
All Type of Services (Incl. Codes Not Listed)	**8,248**	**$1,947,497,111**	**22.5%**	**20.5% - 24.5%**	**6.0%**

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

Part A Excluding Hospital IPPS Services (TOB)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
SNF Inpatient	1,500	$4,752,469,358	14.9%	12.4% - 17.4%	14.8%
Hospital Outpatient	2,249	$3,931,281,258	5.4%	3.6% - 7.2%	12.2%
Hospital Inpatient (Part A)	950	$1,966,884,489	17.7%	14.2% - 21.2%	6.1%
Home Health	1,206	$1,230,945,533	7.7%	5.9% - 9.4%	3.8%
Nonhospital based hospice	737	$1,165,731,047	5.2%	3.3% - 7.0%	3.6%
CAH	270	$466,486,942	6.8%	4.0% - 9.6%	1.4%
Clinic ESRD	616	$204,605,640	2.1%	0.4% - 3.8%	0.6%
Hospital based hospice	148	$127,383,669	8.2%	3.6% - 12.9%	0.4%
Clinic OPT	88	$115,475,866	10.8%	2.5% - 19.1%	0.4%
Clinical Rural Health	302	$64,083,657	3.6%	1.6% - 5.6%	0.2%
FQHC	69	$60,839,466	5.3%	0.2% - 10.4%	0.2%
SNF Inpatient Part B	88	$33,606,859	1.2%	0.1% - 2.4%	0.1%
Hospital Other Part B	101	$31,864,073	5.0%	2.1% - 7.8%	0.1%
All Codes With Less Than 30 Claims	11	$22,675,289	1.4%	(1.5%) - 4.3%	0.1%
Clinic CORF	76	$14,278,364	53.5%	38.9% - 68.1%	0.0%
Hospital Inpatient Part B	45	$14,060,165	0.8%	(0.1%) - 1.6%	0.0%
SNF Outpatient	50	$13,467,557	4.5%	0.2% - 8.7%	0.0%
All Type of Services (Incl. Codes Not Listed)	**8,506**	**$14,216,139,233**	**7.8%**	**6.8% - 8.7%**	**44.1%**

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	1,768	$1,078,427,937	3.6%	2.7% - 4.5%	3.3%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	456	$633,818,171	40.6%	35.1% - 46.2%	2.0%
Percutaneous Intracardiac Procedures (273, 274)	178	$431,040,599	31.0%	20.0% - 42.1%	1.3%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	424	$321,105,091	11.2%	8.2% - 14.1%	1.0%
Respiratory Infections & Inflammations (177, 178, 179)	120	$231,656,917	3.4%	0.1% - 6.6%	0.7%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	79	$165,998,818	9.9%	3.6% - 16.1%	0.5%
Renal Failure (682, 683, 684)	108	$134,932,546	8.5%	1.9% - 15.0%	0.4%
GI Hemorrhage (377, 378, 379)	114	$90,916,394	5.3%	(0.5%) - 11.1%	0.3%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	390	$84,142,339	0.9%	(0.1%) - 1.8%	0.3%
Degenerative Nervous System Disorders (056, 057)	200	$79,193,568	10.5%	5.3% - 15.7%	0.2%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	93	$74,645,730	2.1%	0.2% - 4.0%	0.2%
Other Disorders Of Nervous System (091, 092, 093)	52	$70,850,249	18.1%	7.0% - 29.3%	0.2%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	84	$62,823,144	5.1%	0.3% - 9.8%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	90	$55,024,135	18.7%	10.2% - 27.2%	0.2%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	111	$54,499,746	19.9%	(3.0%) - 42.8%	0.2%
Diabetes (637, 638, 639)	50	$54,133,305	7.7%	(1.2%) - 16.7%	0.2%
Cervical Spinal Fusion (471, 472, 473)	80	$51,474,366	10.0%	(0.6%) - 20.6%	0.2%
AMI, Discharged Alive (280, 281, 282)	100	$50,097,047	2.9%	(0.1%) - 5.8%	0.2%
Stomach, Esophageal & Duodenal Proc (326, 327, 328)	40	$49,751,673	7.4%	(0.4%) - 15.1%	0.2%
Other Kidney & Urinary Tract Diagnoses (698, 699, 700)	66	$48,332,889	4.2%	(0.5%) - 8.9%	0.2%
Kidney & Urinary Tract Infections (689, 690)	63	$48,281,348	3.8%	(0.8%) - 8.3%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	157	$46,482,678	2.5%	0.5% - 4.5%	0.1%
Other Major Cardiovascular Procedures (270, 271, 272)	99	$46,338,378	3.4%	(2.7%) - 9.6%	0.1%
Major Joint/Limb Reattachment Procedure Of Upper Extremities (483)	32	$44,791,001	12.9%	0.7% - 25.2%	0.1%
Organic Disturbances & Intellectual Disability (884)	31	$44,766,291	8.3%	(0.8%) - 17.4%	0.1%
Cardiac Arrhythmia & Conduction Disorders (308, 309, 310)	142	$44,548,309	3.8%	1.1% - 6.4%	0.1%
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes (640, 641)	82	$43,253,085	4.1%	1.2% - 7.0%	0.1%
Circulatory Disorders Except AMI, W Card Cath (286, 287)	67	$42,173,232	4.1%	0.0% - 8.2%	0.1%
Psychoses (885)	76	$39,965,285	1.5%	(0.8%) - 3.8%	0.1%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	72	$39,728,934	16.1%	2.1% - 30.1%	0.1%
Other Digestive System Diagnoses (393, 394, 395)	55	$39,287,598	7.8%	0.4% - 15.2%	0.1%
Major Small & Large Bowel Procedures (329, 330, 331)	85	$38,570,936	1.5%	(1.2%) - 4.1%	0.1%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	109	$36,561,975	1.6%	(0.1%) - 3.3%	0.1%
Signs & Symptoms (947, 948)	95	$32,371,640	14.7%	6.1% - 23.3%	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
Medical Back Problems (551, 552)	43	$31,813,783	6.8%	0.1% - 13.5%	0.1%
Peripheral Vascular Disorders (299, 300, 301)	46	$30,880,280	6.0%	(2.0%) - 14.1%	0.1%
Other Vascular Procedures (252, 253, 254)	84	$29,162,930	2.8%	(1.0%) - 6.6%	0.1%
Fractures Of Hip & Pelvis (535, 536)	45	$28,188,872	11.3%	3.2% - 19.4%	0.1%
Respiratory System Diagnosis W Ventilator Support <=96 Hours (208)	41	$27,629,157	2.7%	(2.5%) - 7.9%	0.1%
Chronic Obstructive Pulmonary Disease (190, 191, 192)	87	$27,389,766	3.1%	0.3% - 5.9%	0.1%
Complications Of Treatment (919, 920, 921)	31	$23,860,956	5.5%	(5.0%) - 16.0%	0.1%
Cirrhosis & Alcoholic Hepatitis (432, 433, 434)	36	$21,919,756	6.1%	(2.2%) - 14.4%	0.1%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	313	$21,295,408	14.4%	9.4% - 19.4%	0.1%
Seizures (100, 101)	49	$21,212,727	3.4%	(0.6%) - 7.4%	0.1%
Red Blood Cell Disorders (811, 812)	58	$20,584,555	3.7%	(1.7%) - 9.0%	0.1%
Cellulitis (602, 603)	89	$20,416,057	4.3%	0.8% - 7.8%	0.1%
Nonspecific Cerebrovascular Disorders (070, 071, 072)	47	$20,170,820	6.6%	0.1% - 13.1%	0.1%
Revision Of Hip Or Knee Replacement (466, 467, 468)	64	$18,928,157	2.2%	(0.8%) - 5.3%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	91	$18,646,425	1.3%	(0.1%) - 2.7%	0.1%
Bilateral Or Multiple Major Joint Procs Of Lower Extremity (461, 462)	72	$18,131,138	28.7%	18.0% - 39.4%	0.1%
Heart Transplant Or Implant Of Heart Assist System (001, 002)	30	$17,820,997	3.0%	(0.3%) - 6.2%	0.1%
Coronary Bypass W/O Cardiac Cath (235, 236)	33	$16,740,131	2.2%	(0.7%) - 5.1%	0.1%
Permanent Cardiac Pacemaker Implant (242, 243, 244)	57	$16,672,721	1.4%	(0.6%) - 3.5%	0.1%
Other Circulatory System Diagnoses (314, 315, 316)	73	$15,781,373	2.4%	(1.1%) - 5.9%	0.0%
Heart Failure & Shock (291, 292, 293)	55	$15,713,772	0.4%	(0.2%) - 1.1%	0.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath (219, 220, 221)	39	$15,109,930	1.2%	(0.6%) - 3.1%	0.0%
GI Obstruction (388, 389, 390)	70	$14,960,640	2.6%	(0.4%) - 5.7%	0.0%
Fx, Sprn, Strn & Disl Except Femur, Hip, Pelvis & Thigh (562, 563)	30	$13,889,069	9.7%	(0.4%) - 19.8%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391, 392)	61	$13,676,845	1.3%	(0.8%) - 3.4%	0.0%
ECMO Or Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (003)	37	$12,897,526	0.6%	(0.3%) - 1.5%	0.0%
Pulmonary Edema & Respiratory Failure (189)	106	$10,019,181	0.6%	(0.6%) - 1.8%	0.0%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	169	$9,774,698	0.5%	(0.4%) - 1.4%	0.0%
Hip Replacement With Principal Diagnosis Of Hip Fracture (521, 522)	69	$9,681,902	0.6%	(0.6%) - 1.9%	0.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W Card Cath (216, 217, 218)	60	$8,945,707	1.7%	(0.2%) - 3.6%	0.0%
Other OR Procedures For Injuries (907, 908, 909)	38	$8,549,652	1.7%	(1.3%) - 4.7%	0.0%
Aftercare (949, 950)	109	$8,190,802	15.1%	3.9% - 26.4%	0.0%
Postoperative Or Post-Traumatic Infections W OR Proc (856, 857, 858)	33	$8,124,301	3.0%	(1.4%) - 7.4%	0.0%
Lower Extrem & Humer Proc Except Hip, Foot, Femur (492, 493, 494)	62	$7,401,389	1.7%	(0.4%) - 3.7%	0.0%
Other Circulatory System OR Procedures (264)	57	$7,183,146	4.2%	(1.2%) - 9.5%	0.0%

Part A Hospital IPPS Services (MS-DRGs)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Hypertension (304, 305)	32	$6,753,671	2.9%	(2.7%) - 8.5%	0.0%
Laparoscopic Cholecystectomy W/O C.D.E. (417, 418, 419)	36	$6,609,300	1.2%	(1.1%) - 3.5%	0.0%
Disorders Of Pancreas Except Malignancy (438, 439, 440)	41	$5,204,033	1.3%	(1.3%) - 3.9%	0.0%
Autologous Bone Marrow Transplant (016, 017)	32	$3,648,834	2.9%	(2.6%) - 8.5%	0.0%
AICD Generator Procedures (245)	52	$2,155,374	5.9%	(0.5%) - 12.3%	0.0%
Female Reproductive System Reconstructive Procedures (748)	56	$1,504,677	15.9%	5.1% - 26.8%	0.0%
Amputation For Circ Sys Disorders Exc Upper Limb & Toe (239, 240, 241)	30	$1,003,804	0.3%	(0.2%) - 0.8%	0.0%
Disorders Of Liver Except Malig, Cirr, Alc Hepa (441, 442, 443)	38	$422,796	0.1%	(0.1%) - 0.4%	0.0%
Pulmonary Embolism (175, 176)	39	$292,242	0.1%	(0.1%) - 0.2%	0.0%
Major Chest Procedures (163, 164, 165)	45	$191,672	0.0%	(0.0%) - 0.1%	0.0%
Alcohol/Drug Abuse Or Dependence W/O Rehabilitation Therapy (896, 897)	47	$0	0.0%	N/A	0.0%
Coronary Bypass W Cardiac Cath (233, 234)	48	$0	0.0%	N/A	0.0%
Kidney & Ureter Procedures For Non-Neoplasm (659, 660, 661)	31	$0	0.0%	N/A	0.0%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (004)	74	$0	0.0%	N/A	0.0%
All Type of Services (Incl. Codes Not Listed)	**8,753**	**$5,049,136,325**	**4.2%**	**3.7% - 4.6%**	**15.7%**

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 Office visits - established by Referring Provider

Office visits - established	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	152	$209,937,302	8.2%	3.8% - 12.6%	18.8%
Family Practice	120	$157,006,837	7.2%	3.2% - 11.2%	14.1%
Nurse Practitioner	102	$116,678,708	6.8%	3.0% - 10.7%	10.4%
All Provider Types With Less Than 30 Claims	69	$68,466,588	5.8%	2.5% - 9.1%	6.1%
Cardiology	66	$55,120,537	3.8%	0.8% - 6.8%	4.9%
Dermatology	36	$45,911,080	5.1%	(0.5%) - 10.7%	4.1%
Physician Assistant	60	$27,426,417	2.5%	(0.4%) - 5.4%	2.5%
Hematology/Oncology	33	$27,204,726	5.1%	0.8% - 9.5%	2.4%
All Provider Types	**955**	**$1,116,881,372**	**6.4%**	**5.2% - 7.6%**	**100.0%**

Table H2: Improper Payment Rates for Lab tests - other (non-Medicare fee schedule) by Provider Type

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	606	$321,198,366	20.3%	14.9% - 25.6%	30.8%
Nurse Practitioner	214	$210,054,147	28.3%	18.3% - 38.4%	20.2%
Family Practice	218	$149,996,375	21.0%	11.6% - 30.4%	14.4%
Physician Assistant	79	$67,550,544	21.3%	8.8% - 33.7%	6.5%
No Referring Provider Type	64	$36,470,989	24.5%	9.8% - 39.2%	3.5%
General Surgery	82	$32,680,086	28.5%	7.6% - 49.3%	3.1%
Anesthesiology	67	$28,649,741	42.6%	28.1% - 57.1%	2.7%
Urology	89	$26,402,283	15.4%	1.3% - 29.4%	2.5%
Physical Medicine and Rehabilitation	35	$21,067,909	51.0%	31.7% - 70.3%	2.0%
Obstetrics/Gynecology	35	$18,814,694	17.3%	2.4% - 32.2%	1.8%
Interventional Pain Management	38	$12,348,925	19.3%	(1.0%) - 39.7%	1.2%
Radiation Oncology	32	$4,051,574	23.8%	1.1% - 46.5%	0.4%
All Referring Providers	**1,774**	**$1,041,921,347**	**22.9%**	**19.4% - 26.3%**	**100.0%**

Table H3: Improper Payment Rates for Minor procedures - other (Medicare fee schedule) by Provider Type

Minor procedures - other (Medicare fee schedule)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
General Surgery	168	$216,211,220	20.9%	12.4% - 29.4%	26.4%
Family Practice	176	$164,014,479	14.8%	2.7% - 26.9%	20.0%
Internal Medicine	395	$143,723,928	14.8%	3.0% - 26.6%	17.5%
Nurse Practitioner	81	$65,081,279	19.7%	6.5% - 33.0%	7.9%
No Referring Provider Type	214	$53,108,365	11.8%	2.1% - 21.6%	6.5%
Physician Assistant	42	$26,176,537	12.6%	(0.9%) - 26.2%	3.2%
Neurology	78	$23,772,105	13.8%	(5.5%) - 33.1%	2.9%
Otolaryngology	33	$140,646	0.4%	(0.3%) - 1.0%	0.0%
Dermatology	30	$0	0.0%	0.0% - 0.0%	0.0%
All Referring Providers	**1,370**	**$819,762,199**	**15.1%**	**10.8% - 19.3%**	**100.0%**

Table H4: Improper Payment Rates for Surgical Dressings by Referring Provider

Surgical Dressings	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Family Practice	94	$93,945,876	72.5%	51.2% - 93.8%	35.8%
General Surgery	51	$88,519,236	87.7%	77.3% - 98.0%	33.7%
Internal Medicine	89	$28,439,928	37.3%	23.5% - 51.1%	10.8%
Nurse Practitioner	48	$13,620,085	52.3%	28.5% - 76.2%	5.2%
Podiatry	30	$8,090,217	25.5%	8.4% - 42.5%	3.1%
All Referring Providers	**370**	**$262,611,125**	**62.1%**	**50.2% - 74.1%**	**100.0%**

Table H5: Improper Payment Rates for CPAP by Referring Provider

CPAP	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	509	$94,052,243	18.4%	13.7% - 23.1%	59.7%
Family Practice	160	$16,467,960	10.0%	3.9% - 16.2%	10.5%
Nurse Practitioner	157	$14,962,427	10.0%	3.4% - 16.6%	9.5%
Neurology	52	$9,166,006	15.3%	2.0% - 28.5%	5.8%
Physician Assistant	66	$6,476,182	10.2%	1.1% - 19.3%	4.1%
All Referring Providers	**1,034**	**$157,518,140**	**15.0%**	**11.9% - 18.0%**	**100.0%**

Table H6: Improper Payment Rates for Ventilators by Referring Provider

Ventilators	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	142	$62,479,249	20.4%	13.3% - 27.6%	46.0%
Nurse Practitioner	37	$13,141,093	15.5%	3.0% - 28.0%	9.7%
All Referring Providers	**241**	**$135,950,716**	**24.3%**	**16.2% - 32.4%**	**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)	1,634	$1,096,443,871	24.3%	20.6% - 27.9%	3.4%
Internal Medicine	934	$1,037,996,182	12.9%	10.2% - 15.7%	3.2%
Cardiology	596	$773,446,615	16.1%	4.7% - 27.5%	2.4%
Family Practice	463	$637,311,268	13.8%	9.8% - 17.8%	2.0%
Physical Therapist in Private Practice	377	$583,305,341	18.6%	14.0% - 23.3%	1.8%
Pulmonary Disease	129	$564,425,253	32.4%	(0.9%) - 65.6%	1.8%
All Provider Types With Less Than 30 Claims	743	$534,557,530	11.4%	6.9% - 15.8%	1.7%
Nurse Practitioner	696	$439,231,481	9.3%	7.1% - 11.4%	1.4%
Diagnostic Radiology	639	$436,040,823	11.4%	7.5% - 15.2%	1.4%
Ambulance Service Supplier (e.g., private ambulance companies)	362	$421,830,079	10.8%	6.9% - 14.8%	1.3%
Radiation Oncology	160	$391,622,945	34.9%	14.2% - 55.6%	1.2%
Ophthalmology	300	$266,590,400	3.3%	0.8% - 5.8%	0.8%
Orthopedic Surgery	77	$246,444,601	10.7%	1.4% - 20.0%	0.8%
Unknown Provider Type	269	$226,815,273	37.2%	26.2% - 48.2%	0.7%
Psychiatry	86	$215,641,010	26.2%	1.6% - 50.7%	0.7%
Chiropractic	158	$214,123,439	39.3%	29.0% - 49.5%	0.7%
Nephrology	177	$188,727,829	11.7%	6.1% - 17.2%	0.6%
Ambulatory Surgical Center	140	$188,367,525	2.6%	(0.3%) - 5.4%	0.6%
Emergency Medicine	302	$185,198,022	8.7%	5.6% - 11.8%	0.6%
Podiatry	211	$181,033,082	6.6%	1.6% - 11.5%	0.6%
Physician Assistant	275	$180,547,943	7.0%	3.6% - 10.5%	0.6%
Neurology	162	$180,285,934	13.7%	7.7% - 19.7%	0.6%
Dermatology	182	$173,902,675	4.6%	(0.3%) - 9.6%	0.5%
Hematology/Oncology	380	$167,173,471	2.1%	0.5% - 3.8%	0.5%
Hospitalist	190	$116,913,282	10.8%	5.2% - 16.4%	0.4%
Infectious Disease	67	$115,266,587	25.0%	12.4% - 37.7%	0.4%
Physical Medicine and Rehabilitation	112	$113,496,387	13.7%	6.4% - 21.1%	0.4%
Gastroenterology	95	$103,583,553	8.2%	0.1% - 16.4%	0.3%
CRNA	38	$88,444,528	11.8%	(0.0%) - 23.7%	0.3%
Clinical Psychologist	106	$86,144,303	9.4%	4.4% - 14.4%	0.3%
Anesthesiology	102	$84,692,048	5.9%	0.3% - 11.6%	0.3%
Portable X-Ray Supplier (Billing Independently)	79	$79,661,276	47.2%	28.7% - 65.7%	0.2%

Providers Billing to Part B	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Optometry	66	$76,545,181	8.5%	4.0% - 13.1%	0.2%
Urology	80	$75,669,532	4.7%	1.9% - 7.5%	0.2%
Cardiac Electrophysiology	109	$73,227,017	10.6%	2.7% - 18.5%	0.2%
IDTF	223	$68,398,374	8.4%	4.2% - 12.5%	0.2%
General Surgery	82	$60,030,280	4.0%	(0.0%) - 8.0%	0.2%
Clinical Social Worker	115	$58,986,322	12.5%	4.3% - 20.7%	0.2%
Interventional Cardiology	118	$48,382,876	7.1%	2.3% - 11.8%	0.2%
Otolaryngology	94	$47,939,093	7.2%	2.3% - 12.1%	0.1%
Endocrinology	45	$33,069,224	4.3%	0.3% - 8.3%	0.1%
Medical Oncology	113	$32,079,740	2.5%	0.4% - 4.6%	0.1%
Vascular Surgery	102	$26,583,009	3.6%	(0.1%) - 7.4%	0.1%
Pathology	101	$23,441,675	2.3%	0.5% - 4.0%	0.1%
Rheumatology	156	$14,345,286	0.6%	(0.1%) - 1.3%	0.0%
Interventional Radiology	36	$13,926,535	5.4%	(2.7%) - 13.5%	0.0%
Occupational Therapist in Private Practice	39	$13,576,838	3.2%	(1.6%) - 7.9%	0.0%
All other suppliers, e.g., Drug Stores	30	$2,647,048	12.8%	(1.3%) - 26.9%	0.0%
Centralized Flu	78	$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)	175	$0	0.0%	0.0% - 0.0%	0.0%
Overall (Incl. Codes Not Listed)	**12,001**	**$10,988,112,586**	**10.0%**	**8.6% - 11.5%**	**34.1%**

Table I2: Improper Payment Rates and Amounts by Provider Type[17]: 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	3,865	$1,147,505,612	25.6%	22.6% - 28.7%	3.6%
Pharmacy	2,492	$460,540,965	18.5%	14.8% - 22.2%	1.4%
Medical Supply Company with Respiratory Therapist	832	$132,041,846	17.8%	14.0% - 21.6%	0.4%
All Provider Types With Less Than 30 Claims	236	$67,381,864	40.5%	28.9% - 52.0%	0.2%
Orthopedic Surgery	146	$31,492,946	41.1%	30.9% - 51.4%	0.1%
Podiatry	94	$29,934,209	47.5%	28.4% - 66.6%	0.1%
Medical supply company with orthotic personnel certified by an accrediting organization	126	$19,233,143	17.4%	6.7% - 28.2%	0.1%
Individual orthotic personnel certified by an accrediting organization	124	$18,302,378	10.6%	2.6% - 18.6%	0.1%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	63	$11,387,146	11.4%	0.8% - 22.0%	0.0%
Supplier of oxygen and/or oxygen related equipment	53	$9,526,265	14.7%	2.2% - 27.2%	0.0%
Individual prosthetic personnel certified by an accrediting organization	101	$8,182,383	5.5%	1.6% - 9.5%	0.0%
General Practice	78	$6,447,663	18.8%	6.1% - 31.4%	0.0%
Multispecialty Clinic or Group Practice	38	$5,520,691	39.2%	18.6% - 59.8%	0.0%
Overall (Incl. Codes Not Listed)	**8,248**	**$1,947,497,111**	**22.5%**	**20.5% - 24.5%**	**6.0%**

[17] 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	1,638	$4,799,543,774	13.8%	11.5% - 16.1%	14.9%
OPPS, Laboratory, Ambulatory	2,398	$3,977,205,496	5.2%	3.5% - 6.9%	12.4%
Hospice	885	$1,293,114,716	5.4%	3.6% - 7.1%	4.0%
HHA	1,214	$1,253,620,822	7.8%	6.0% - 9.6%	3.9%
Inpatient Rehabilitation Hospitals	246	$1,134,190,716	27.6%	20.7% - 34.5%	3.5%
Inpatient Rehab Unit	319	$723,344,030	26.9%	19.2% - 34.7%	2.2%
CAH Outpatient Services	270	$466,486,942	6.8%	4.0% - 9.6%	1.4%
ESRD	616	$204,605,640	2.1%	0.4% - 3.8%	0.6%
ORF	88	$115,475,866	10.8%	2.5% - 19.1%	0.4%
RHC	302	$64,083,657	3.6%	1.6% - 5.6%	0.2%
FQHC	69	$60,839,466	5.3%	0.2% - 10.4%	0.2%
Inpatient CAH	297	$60,455,402	2.4%	(0.2%) - 5.0%	0.2%
Other MAC Service Types	23	$31,169,731	8.5%	(5.2%) - 22.2%	0.1%
CORF	76	$14,278,364	53.5%	38.9% - 68.1%	0.0%
Non PPS Short Term Hospital Inpatient	53	$9,825,803	0.8%	(0.8%) - 2.3%	0.0%
All Codes With Less Than 30 Claims	12	$7,898,807	5.1%	(5.0%) - 15.3%	0.0%
Overall (Incl. Codes Not Listed)	**8,506**	**$14,216,139,233**	**7.8%**	**6.8% - 8.7%**	**44.1%**

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	8,430	$4,910,897,198	4.3%	3.8% - 4.7%	15.3%
Other MAC Service Type	174	$133,294,696	4.2%	0.8% - 7.7%	0.4%
DRG Long Term	149	$4,944,432	0.2%	(0.1%) - 0.4%	0.0%
Overall (Incl. Codes Not Listed)	**8,753**	**$5,049,136,325**	**4.2%**	**3.7% - 4.6%**	**15.7%**

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
Portable X-Ray Supplier (Billing Independently)	47.2%	79	0.0%	95.0%	0.0%	0.0%	5.0%
Chiropractic	39.3%	158	5.4%	92.4%	0.6%	1.6%	0.0%
Unknown Provider Type	37.2%	269	0.8%	95.5%	0.0%	0.0%	3.7%
Radiation Oncology	34.9%	160	5.0%	93.0%	0.7%	0.5%	0.8%
Pulmonary Disease	32.4%	129	0.2%	83.3%	0.0%	13.3%	3.2%
Psychiatry	26.2%	86	0.0%	86.9%	0.0%	12.8%	0.3%
Infectious Disease	25.0%	67	21.5%	31.2%	0.0%	47.3%	0.0%
Clinical Laboratory (Billing Independently)	24.3%	1,634	1.1%	93.7%	1.4%	0.3%	3.5%
Physical Therapist in Private Practice	18.6%	377	3.1%	81.8%	0.0%	1.1%	13.9%
Cardiology	16.1%	596	0.9%	83.0%	0.9%	14.6%	0.6%
Family Practice	13.8%	463	11.6%	55.9%	0.0%	31.9%	0.6%
Physical Medicine and Rehabilitation	13.7%	112	2.0%	73.8%	0.0%	21.4%	2.9%
Neurology	13.7%	162	5.3%	51.1%	0.8%	37.6%	5.2%
Internal Medicine	12.9%	934	11.7%	46.5%	0.3%	35.1%	6.4%
All other suppliers, e.g., Drug Stores	12.8%	30	0.0%	74.2%	0.0%	0.0%	25.8%
Clinical Social Worker	12.5%	115	0.0%	81.7%	0.0%	7.4%	11.0%
CRNA	11.8%	38	0.0%	100.0%	0.0%	0.0%	0.0%
Nephrology	11.7%	177	4.3%	56.6%	0.0%	33.9%	5.3%
Diagnostic Radiology	11.4%	639	21.3%	77.2%	0.0%	1.5%	0.0%
All Provider Types With Less Than 30 Claims	11.4%	743	4.1%	62.2%	0.0%	19.7%	14.1%
Ambulance Service Supplier (e.g., private ambulance companies)	10.8%	362	5.2%	48.2%	42.2%	4.3%	0.0%
Hospitalist	10.8%	190	24.2%	33.6%	0.0%	40.2%	1.9%
Orthopedic Surgery	10.7%	77	0.0%	54.8%	0.0%	41.8%	3.4%
Cardiac Electrophysiology	10.6%	109	7.6%	56.2%	0.0%	36.2%	0.0%
Clinical Psychologist	9.4%	106	15.2%	57.9%	0.0%	23.0%	4.0%
Nurse Practitioner	9.3%	696	4.7%	41.7%	9.1%	40.7%	3.8%
Emergency Medicine	8.7%	302	7.4%	36.7%	0.0%	54.8%	1.1%
Optometry	8.5%	66	0.0%	63.9%	0.0%	32.9%	3.2%
IDTF	8.4%	223	2.6%	88.9%	0.0%	0.1%	8.3%
Gastroenterology	8.2%	95	6.0%	82.9%	0.0%	11.1%	0.0%
Otolaryngology	7.2%	94	8.9%	11.7%	0.0%	79.3%	0.1%

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
Interventional Cardiology	7.1%	118	0.1%	56.6%	0.0%	33.9%	9.4%
Physician Assistant	7.0%	275	2.1%	49.4%	4.4%	37.9%	6.1%
Podiatry	6.6%	211	0.0%	95.1%	0.0%	4.7%	0.2%
Anesthesiology	5.9%	102	0.5%	76.0%	3.8%	8.1%	11.6%
Interventional Radiology	5.4%	36	0.0%	100.0%	0.0%	0.0%	0.0%
Urology	4.7%	80	0.0%	24.6%	0.6%	74.8%	0.0%
Dermatology	4.6%	182	0.0%	15.9%	0.0%	27.9%	56.2%
Endocrinology	4.3%	45	0.0%	27.9%	0.0%	53.8%	18.3%
General Surgery	4.0%	82	0.0%	53.6%	0.0%	46.3%	0.0%
Vascular Surgery	3.6%	102	0.0%	47.6%	11.7%	40.7%	0.0%
Ophthalmology	3.3%	300	0.0%	81.6%	0.0%	18.4%	0.0%
Occupational Therapist in Private Practice	3.2%	39	0.0%	100.0%	0.0%	0.0%	0.0%
Ambulatory Surgical Center	2.6%	140	0.0%	100.0%	0.0%	0.0%	0.0%
Medical Oncology	2.5%	113	0.0%	19.6%	0.0%	80.4%	0.0%
Pathology	2.3%	101	0.0%	100.0%	0.0%	0.0%	0.0%
Hematology/Oncology	2.1%	380	1.4%	56.1%	0.0%	36.0%	6.4%
Rheumatology	0.6%	156	0.2%	77.4%	0.0%	22.3%	0.1%
Centralized Flu	0.0%	78	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%	175	N/A	N/A	N/A	N/A	N/A
All Provider Types	**10.0%**	**12,001**	**5.0%**	**68.8%**	**2.4%**	**19.1%**	**4.7%**

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

Provider Types Billing to DMEPOS	Improper Payment Rate	Claims Reviewed	Percentage of Provider Type Improper Payments by Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Podiatry	47.5%	94	0.0%	86.6%	1.0%	0.2%	12.2%
Orthopedic Surgery	41.1%	146	2.9%	59.3%	13.3%	0.0%	24.5%
All Provider Types With Less Than 30 Claims	40.5%	236	1.0%	58.9%	12.9%	0.0%	27.1%
Multispecialty Clinic or Group Practice	39.2%	38	11.8%	51.6%	2.5%	3.9%	30.2%
Medical supply company not included in 51, 52, or 53	25.6%	3,865	20.9%	57.1%	6.7%	1.0%	14.4%
General Practice	18.8%	78	9.4%	45.0%	17.1%	0.9%	27.7%
Pharmacy	18.5%	2,492	3.9%	57.6%	9.7%	0.9%	27.9%
Medical Supply Company with Respiratory Therapist	17.8%	832	0.5%	60.0%	3.9%	0.1%	35.5%
Medical supply company with orthotic personnel certified by an accrediting organization	17.4%	126	26.1%	52.2%	9.9%	0.0%	11.7%
Supplier of oxygen and/or oxygen related equipment	14.7%	53	0.0%	77.4%	1.5%	0.0%	21.1%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	11.4%	63	0.0%	33.0%	43.6%	0.0%	23.4%
Individual orthotic personnel certified by an accrediting organization	10.6%	124	0.0%	90.2%	2.6%	0.0%	7.2%
Individual prosthetic personnel certified by an accrediting organization	5.5%	101	15.1%	64.4%	0.0%	0.0%	20.5%
All Provider Types	**22.5%**	**8,248**	**13.7%**	**58.2%**	**7.6%**	**0.8%**	**19.7%**

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	53.5%	76	0.0%	88.1%	0.0%	0.0%	11.9%
Inpatient Rehabilitation Hospitals	27.6%	246	0.0%	0.3%	99.7%	0.0%	0.0%
Inpatient Rehab Unit	26.9%	319	0.0%	13.9%	86.1%	0.0%	0.0%
SNF	13.8%	1,638	0.2%	79.2%	0.2%	1.2%	19.2%
ORF	10.8%	88	0.0%	83.0%	0.0%	3.1%	13.9%
Other MAC Service Types	8.5%	23	0.0%	0.0%	100.0%	0.0%	0.0%
HHA	7.8%	1,214	1.4%	39.7%	45.9%	2.8%	10.2%
CAH Outpatient Services	6.8%	270	0.3%	68.5%	0.9%	28.7%	1.7%
Hospice	5.4%	885	7.5%	81.1%	4.4%	0.5%	6.5%
FQHC	5.3%	69	0.0%	94.3%	0.0%	0.1%	5.5%
OPPS, Laboratory, Ambulatory	5.2%	2,398	2.7%	88.5%	2.2%	6.2%	0.5%
All Codes With Less Than 30 Claims	5.1%	12	0.0%	100.0%	0.0%	0.0%	0.0%
RHC	3.6%	302	0.0%	82.8%	0.0%	17.2%	0.0%
Inpatient CAH	2.4%	297	0.0%	0.0%	100.0%	0.0%	0.0%
ESRD	2.1%	616	0.0%	52.8%	0.0%	38.6%	8.6%
Non PPS Short Term Hospital Inpatient	0.8%	53	0.0%	100.0%	0.0%	0.0%	0.0%
All Provider Types	**7.8%**	**8,506**	**1.7%**	**67.8%**	**18.1%**	**4.0%**	**8.4%**

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
DRG Short Term	4.3%	8,430	2.2%	24.7%	53.0%	19.2%	0.9%
Other MAC Service Types	4.2%	174	0.0%	49.9%	47.4%	2.7%	0.0%
DRG Long Term	0.2%	149	11.5%	0.0%	84.9%	3.5%	0.0%
All Provider Types	**4.2%**	**8,753**	**2.1%**	**25.3%**	**52.9%**	**18.8%**	**0.9%**

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	
Office o/p est mod 30-39 min (99214)	$666,517,510	6.7%	5.0% - 8.4%	15.3%	13.5%	0.0%	67.7%	3.5%	2.1%
All Codes With Less Than 30 Claims	$554,501,336	27.7%	20.0% - 35.3%	4.7%	85.3%	1.2%	4.1%	4.7%	1.7%
1st hosp ip/obs high 75 (99223)	$368,500,910	25.6%	22.3% - 28.9%	9.8%	22.9%	0.0%	65.1%	2.2%	1.1%
Sbsq hosp ip/obs high 50 (99233)	$332,814,421	15.8%	13.0% - 18.7%	5.1%	27.4%	0.0%	64.6%	3.0%	1.0%
Office o/p est hi 40-54 min (99215)	$251,258,522	16.3%	12.6% - 20.1%	0.0%	16.7%	0.0%	80.5%	2.9%	0.8%
Sbsq hosp ip/obs moderate 35 (99232)	$207,578,524	9.3%	(0.4%) - 19.0%	0.0%	85.7%	0.0%	5.1%	9.2%	0.6%
Critical care first hour (99291)	$169,784,422	16.1%	10.7% - 21.5%	10.8%	14.1%	0.0%	70.5%	4.6%	0.5%
Office o/p new mod 45-59 min (99204)	$122,801,002	7.1%	3.2% - 11.1%	0.0%	0.1%	0.0%	79.4%	20.5%	0.4%
Emergency dept visit hi mdm (99285)	$112,606,535	8.8%	5.8% - 11.8%	8.0%	9.7%	0.0%	82.2%	0.0%	0.3%
Office o/p est low 20-29 min (99213)	$108,733,225	2.0%	0.5% - 3.5%	0.0%	0.0%	0.0%	100.0%	0.0%	0.3%
Chrnc care mgmt staff 1st 20 (99490)	$108,434,597	60.6%	47.8% - 73.4%	3.9%	94.1%	0.0%	0.0%	2.0%	0.3%
Office o/p new hi 60-74 min (99205)	$98,811,864	19.2%	13.2% - 25.3%	0.0%	18.3%	0.0%	71.8%	10.0%	0.3%
Sbsq nf care moderate mdm 30 (99309)	$79,352,402	10.9%	4.0% - 17.7%	26.2%	28.7%	0.0%	19.5%	25.6%	0.2%
Sbsq nf care low mdm 15 (99308)	$73,295,833	14.9%	6.5% - 23.2%	29.7%	64.2%	0.0%	6.1%	0.0%	0.2%
1st hosp ip/obs moderate 55 (99222)	$62,561,828	14.3%	8.5% - 20.1%	0.0%	35.1%	0.0%	64.9%	0.0%	0.2%
1st nf care high mdm 45 (99306)	$57,287,233	34.1%	27.2% - 41.0%	0.0%	27.7%	0.0%	72.3%	0.0%	0.2%
Office o/p new low 30-44 min (99203)	$51,787,009	5.1%	0.4% - 9.9%	0.0%	32.7%	0.0%	36.6%	30.7%	0.2%
Initial observation care (99220)	$42,524,118	22.9%	14.6% - 31.2%	0.0%	35.1%	0.0%	37.4%	27.5%	0.1%
Phone e/m phys/qhp 11-20 min (99442)	$40,320,136	25.8%	15.5% - 36.0%	0.0%	75.4%	0.0%	13.8%	10.7%	0.1%
Sbsq nf care high mdm 45 (99310)	$40,260,124	22.3%	13.4% - 31.3%	0.0%	43.3%	0.0%	50.5%	6.2%	0.1%
Phone e/m phys/qhp 21-30 min (99443)	$39,012,506	22.8%	12.9% - 32.6%	0.0%	72.0%	0.0%	15.1%	12.8%	0.1%
Office o/p est sf 10-19 min (99212)	$28,773,540	6.6%	1.6% - 11.7%	0.5%	27.0%	0.0%	72.5%	0.0%	0.1%
Hosp ip/obs dschrg mgmt >30 (99239)	$27,852,210	6.8%	3.2% - 10.4%	0.0%	51.5%	0.0%	48.5%	0.0%	0.1%
Advncd care plan 30 min (99497)	$26,699,028	19.1%	9.5% - 28.8%	1.7%	98.3%	0.0%	0.0%	0.0%	0.1%
Domicil/r-home visit est pat (99336)	$22,464,712	11.6%	3.4% - 19.8%	14.1%	36.4%	0.0%	37.6%	11.9%	0.1%
Emergency dept visit mod mdm (99284)	$13,631,014	3.4%	(0.6%) - 7.5%	0.0%	83.2%	0.0%	16.8%	0.0%	0.0%
Overall (E&M Codes)	**$3,708,164,563**	**10.7%**	**9.5% - 11.9%**	**7.5%**	**34.0%**	**0.0%**	**52.4%**	**6.1%**	**11.5%**

Table K2: Impact of 1-Level E&M (Top 20)[18]

Final E & M Codes	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office o/p est mod 30-39 min (99214)	$418,428,801	4.2%	3.2% - 5.2%
Sbsq hosp ip/obs high 50 (99233)	$191,951,906	9.1%	7.6% - 10.6%
Office o/p est hi 40-54 min (99215)	$135,930,471	8.8%	6.3% - 11.4%
Office o/p est low 20-29 min (99213)	$108,733,225	2.0%	0.5% - 3.5%
1st hosp ip/obs high 75 (99223)	$95,859,028	6.7%	5.3% - 8.0%
Office o/p new mod 45-59 min (99204)	$92,244,283	5.4%	2.5% - 8.2%
Emergency dept visit hi mdm (99285)	$83,166,335	6.5%	4.5% - 8.5%
Office o/p new hi 60-74 min (99205)	$60,140,080	11.7%	8.6% - 14.8%
Office o/p new low 30-44 min (99203)	$18,961,027	1.9%	0.1% - 3.7%
1st hosp ip/obs moderate 55 (99222)	$17,696,126	4.1%	1.8% - 6.3%
Office o/p est sf 10-19 min (99212)	$16,665,779	3.9%	0.5% - 7.2%
Hosp ip/obs dschrg mgmt >30 (99239)	$13,507,357	3.3%	1.5% - 5.1%
1st nf care high mdm 45 (99306)	$12,061,953	7.2%	4.4% - 9.9%
Sbsq nf care moderate mdm 30 (99309)	$11,865,221	1.6%	0.3% - 3.0%
Sbsq nf care high mdm 45 (99310)	$11,827,228	6.6%	3.5% - 9.6%
Initial observation care (99220)	$10,120,679	5.4%	2.9% - 8.0%
Domicil/r-home visit est pat (99336)	$8,785,471	4.5%	1.9% - 7.2%
Phone e/m phys/qhp 11-20 min (99442)	$5,579,871	3.6%	0.5% - 6.6%
Phone e/m phys/qhp 21-30 min (99443)	$5,149,449	3.0%	0.9% - 5.1%
Sbsq nf care low mdm 15 (99308)	$4,445,378	0.9%	(0.3%) - 2.1
All Other Codes	$59,958,612	0.1%	0.0% - 0.1%
Overall (1-Level E&M Codes)	**$1,383,078,280**	**1.3%**	**1.1% - 1.4%**

[18] 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[19] Errors: Part B

Part B Services (BETOS Codes)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office visits - established	$673,374,992	3.8%	3.1% - 4.6%
Hospital visit - initial	$292,447,649	13.7%	11.8% - 15.5%
Hospital visit - subsequent	$231,304,719	4.5%	3.6% - 5.4%
Office visits - new	$187,403,360	5.5%	3.8% - 7.2%
Hospital visit - critical care	$119,765,480	11.0%	6.0% - 16.1%
Nursing home visit	$111,856,946	5.2%	3.5% - 6.8%
Emergency room visit	$94,895,129	5.4%	3.8% - 7.1%
Specialist - other	$33,205,749	1.2%	(0.2%) - 2.6%
Ambulance	$14,523,921	0.4%	0.1% - 0.7%
Minor procedures - other (Medicare fee schedule)	$12,627,136	0.2%	0.0% - 0.5%
Other drugs	$11,817,744	0.1%	0.0% - 0.2%
Ambulatory procedures - skin	$4,207,919	0.2%	(0.1%) - 0.4%
Other - Medicare fee schedule	$4,206,912	1.9%	(1.8%) - 5.6%
Chiropractic	$2,973,627	0.5%	(0.2%) - 1.3%
Specialist - psychiatry	$2,868,139	0.2%	(0.0%) - 0.5%
Dialysis services (Medicare Fee Schedule)	$2,322,217	0.3%	(0.1%) - 0.6%
Lab tests - other (non-Medicare fee schedule)	$2,133,941	0.0%	(0.0%) - 0.1%
Other - non-Medicare fee schedule	$1,095,016	2.8%	(0.4%) - 6.0%
Standard imaging - nuclear medicine	$1,076,135	0.1%	(0.1%) - 0.3%
Minor procedures - skin	$616,390	0.1%	(0.1%) - 0.2%
All Other Codes	$22,101,656	0.1%	(0.0%) - 0.1%
Overall (Part B)	**$1,826,824,776**	**1.7%**	**1.4% - 1.9%**

[19] 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	$4,003,569	1.0%	(0.7%) - 2.7%
Surgical Dressings	$3,430,219	0.8%	0.1% - 1.5%
Infusion Pumps & Related Drugs	$1,764,957	0.3%	(0.0%) - 0.6%
Repairs/DMEPOS	$1,576,224	20.7%	6.3% - 35.1%
All Policy Groups with Less than 30 Claims	$1,312,822	0.5%	(0.4%) - 1.4%
Parenteral Nutrition	$1,228,864	0.5%	(0.3%) - 1.4%
CPAP	$385,557	0.0%	(0.0%) - 0.1%
Enteral Nutrition	$306,384	0.2%	0.0% - 0.4%
Hospital Beds/Accessories	$274,004	0.4%	(0.4%) - 1.3%
Walkers	$115,250	0.3%	(0.3%) - 1.0%
Glucose Monitor	$95,758	0.0%	(0.0%) - 0.0%
Ostomy Supplies	$41,534	0.0%	(0.0%) - 0.0%
Overall (DMEPOS)	**$14,535,141**	**0.2%**	**0.1% - 0.3%**

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
CAH	$88,485,453	1.3%	(0.3%) - 2.9%
SNF Inpatient	$57,101,580	0.2%	(0.1%) - 0.4%
Hospital Outpatient	$52,748,618	0.1%	0.0% - 0.1%
Home Health	$34,629,089	0.2%	(0.1%) - 0.5%
Clinical Rural Health	$11,027,018	0.6%	(0.3%) - 1.5%
Nonhospital based hospice	$3,208,147	0.0%	(0.0%) - 0.0%
Clinic OPT	$3,020,079	0.3%	(0.3%) - 0.8%
Hospital Other Part B	$1,302,733	0.2%	(0.2%) - 0.6%
Hospital based hospice	$234,722	0.0%	(0.0%) - 0.0%
Clinic ESRD	$89,673	0.0%	(0.0%) - 0.0%
Overall (Part A Excluding Hospital IPPS)	**$251,847,111**	**0.1%**	**0.1% - 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
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	$56,584,378	1.6%	(0.0%) - 3.3%
Respiratory Infections & Inflammations (177, 178, 179)	$46,879,694	0.7%	(0.6%) - 1.9%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$40,656,066	3.3%	(1.2%) - 7.8%
Other Kidney & Urinary Tract Diagnoses (698, 699, 700)	$20,472,320	1.8%	(1.1%) - 4.7%
Renal Failure (682, 683, 684)	$15,198,940	1.0%	(0.9%) - 2.8%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$14,863,542	0.2%	(0.1%) - 0.5%
Chronic Obstructive Pulmonary Disease (190, 191, 192)	$13,761,349	1.6%	(0.1%) - 3.2%
ECMO Or Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (003)	$12,897,526	0.6%	(0.3%) - 1.5%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$11,084,745	0.6%	(0.6%) - 1.8%
Hip Replacement With Principal Diagnosis Of Hip Fracture (521, 522)	$9,681,902	0.6%	(0.6%) - 1.9%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	$9,427,646	0.5%	(0.4%) - 1.3%
Heart Transplant Or Implant Of Heart Assist System (001, 002)	$7,327,759	1.2%	(1.2%) - 3.6%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$7,162,872	0.4%	(0.2%) - 1.0%
Cardiac Arrhythmia & Conduction Disorders (308, 309, 310)	$7,009,263	0.6%	(0.3%) - 1.5%
Cellulitis (602, 603)	$6,466,182	1.4%	(0.2%) - 3.0%
Cardiac Valve & Oth Maj Cardiothoracic Proc W Card Cath (216, 217, 218)	$6,183,532	1.2%	(0.4%) - 2.8%
Kidney & Urinary Tract Infections (689, 690)	$6,131,486	0.5%	(0.4%) - 1.4%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	$6,079,950	0.3%	(0.3%) - 0.8%
Postoperative Or Post-Traumatic Infections W OR Proc (856, 857, 858)	$5,864,506	2.2%	(2.0%) - 6.3%
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes (640, 641)	$5,391,736	0.5%	(0.1%) - 1.1%
All Other Codes	$233,893,360	0.3%	0.1% - 0.4%
Overall (Part A Hospital IPPS)	**$543,018,755**	**0.4%**	**0.3% - 0.6%**

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	5,009	10,437	$187,210	$1,650,934	$4,217,270,120	8.3%	5.6% - 11.0%
Office o/p est mod 30-39 min (99214)	442	442	$3,549	$51,971	$666,517,510	6.7%	5.0% - 8.4%
1st hosp ip/obs high 75 (99223)	394	396	$18,147	$71,987	$367,203,155	25.5%	22.2% - 28.8%
Sbsq hosp ip/obs high 50 (99233)	479	665	$9,963	$63,110	$332,814,421	15.8%	13.0% - 18.7%
Therapeutic exercises (97110)	233	245	$2,150	$9,384	$277,558,793	22.5%	15.9% - 29.1%
Ppps, subseq visit (G0439)	199	199	$5,971	$22,576	$275,628,512	28.3%	18.9% - 37.6%
Office o/p est hi 40-54 min (99215)	182	182	$4,846	$29,666	$251,258,522	16.3%	12.6% - 20.1%
Sbsq hosp ip/obs moderate 35 (99232)	180	326	$1,302	$21,118	$199,373,643	8.9%	(0.8%) - 18.7%
BLS-emergency (A0429)	71	72	$4,591	$22,583	$174,314,884	21.6%	10.8% - 32.5%
Critical care first hour (99291)	212	278	$8,099	$52,740	$169,784,422	16.1%	10.7% - 21.5%
Chiropract manj 3-4 regions (98941)	73	82	$1,180	$2,974	$159,864,807	39.2%	27.3% - 51.1%
Xcapsl ctrc rmvl w/o ecp (66984)	142	143	$7,831	$85,533	$149,241,566	9.3%	3.7% - 15.0%
Therapeutic activities (97530)	196	205	$1,409	$9,954	$132,520,507	17.0%	10.9% - 23.0%
Office o/p new mod 45-59 min (99204)	74	74	$904	$11,730	$122,801,002	7.1%	3.2% - 11.1%
Radiation tx delivery imrt (G6015)	91	118	$14,082	$43,505	$122,581,820	29.7%	10.2% - 49.1%
Cov-19 amp prb hgh thruput (U0003)	64	64	$825	$3,925	$121,586,729	23.1%	11.3% - 35.0%
Psytx w pt 60 minutes (90837)	144	190	$4,365	$24,048	$117,919,599	17.7%	9.9% - 25.5%
Emergency dept visit hi mdm (99285)	164	164	$2,368	$26,781	$112,606,535	8.8%	5.8% - 11.8%
Chrnc care mgmt staff 1st 20 (99490)	73	77	$2,086	$3,414	$108,434,597	60.6%	47.8% - 73.4%
Office o/p new hi 60-74 min (99205)	73	73	$2,487	$14,036	$98,811,864	19.2%	13.2% - 25.3%
All Other Codes	7,775	11,298	$1,173,525	$17,290,835	$2,541,375,429	8.7%	7.8% - 9.6%
Total (Part B)	**12,001**	**25,730**	**$1,456,890**	**$19,512,803**	**$10,719,468,437**	**9.8%**	**8.4% - 11.2%**

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

DMEPOS (HCPCS)	Claims Reviewed	Lines Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,556	5,357	$359,778	$2,894,601	$547,559,193	25.8%	20.3% - 31.4%
Collagen dressing <=16 sq in (A6021)	46	54	$64,385	$74,618	$101,406,829	83.1%	70.5% - 95.7%
Coude tip urinary catheter (A4352)	41	42	$24,553	$53,464	$89,426,462	45.7%	25.8% - 65.6%
Home vent non-invasive inter (E0466)	194	207	$36,013	$197,828	$86,848,530	18.1%	12.5% - 23.7%
Ther cgm supply allowance (K0553)	306	309	$7,055	$68,656	$67,337,881	10.3%	6.7% - 13.9%
Oxygen concentrator (E1390)	329	334	$3,334	$29,838	$65,729,055	11.1%	7.3% - 14.9%
Parenteral sol 74-100 gm pro (B4197)	133	171	$78,729	$194,766	$37,472,773	40.2%	30.1% - 50.4%
Insulin for insulin pump use (J1817)	93	93	$27,115	$93,563	$34,654,333	29.2%	18.3% - 40.1%
CPAP full face mask (A7030)	275	275	$4,987	$27,795	$28,189,526	17.5%	11.7% - 23.4%
Blood glucose/reagent strips (A4253)	109	116	$754	$2,116	$28,095,956	35.8%	23.6% - 47.9%
Aed garment w elec analysis (K0606)	38	38	$16,459	$99,998	$24,850,275	16.5%	4.9% - 28.1%
Pneum compressor segmental (E0651)	40	40	$28,926	$37,204	$24,441,296	78.2%	64.5% - 91.8%
Nasal application device (A7034)	223	223	$2,697	$14,270	$23,906,925	18.9%	13.5% - 24.2%
Elec stim cancer treatment (E0766)	41	41	$178,077	$259,741	$23,545,567	68.7%	47.9% - 89.5%
Alginate drsg >16 <=48 sq in (A6197)	53	54	$17,595	$32,179	$23,251,446	63.1%	42.0% - 84.3%
Replacement facemask interfa (A7031)	159	160	$2,182	$14,793	$23,021,865	14.9%	9.2% - 20.6%
Inj cuvitru, 100 mg (J1555)	41	51	$69,762	$219,647	$22,607,218	31.5%	15.3% - 47.7%
Ko single upright prefab ots (L1851)	163	201	$59,061	$101,582	$22,115,578	58.3%	48.6% - 68.0%
Parenteral sol 52-73 gm prot (B4193)	70	105	$30,250	$69,271	$20,947,514	44.7%	26.7% - 62.7%
Neg press wound therapy pump (E2402)	39	39	$8,772	$30,160	$20,254,306	28.7%	12.7% - 44.8%
All Other Codes	5,786	10,044	$447,633	$2,408,252	$629,164,383	19.2%	17.5% - 20.9%
Total (DMEPOS)	**8,248**	**17,954**	**$1,468,118**	**$6,924,340**	**$1,944,826,910**	**22.5%**	**20.5% - 24.5%**

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	1,500	$2,284,123	$11,894,170	$4,733,902,539	14.8%	12.4% - 17.3%
Hospital Outpatient	2,249	$155,841	$3,349,962	$3,739,355,582	5.2%	3.4% - 6.9%
Hospital Inpatient (Part A)	950	$3,503,357	$18,803,811	$1,966,884,489	17.7%	14.2% - 21.2%
Home Health	1,206	$279,040	$2,020,420	$1,230,945,533	7.7%	5.9% - 9.4%
Nonhospital based hospice	737	$154,792	$2,991,869	$1,163,289,431	5.2%	3.3% - 7.0%
CAH	270	$9,094	$154,129	$421,140,621	6.1%	3.5% - 8.8%
Clinic ESRD	616	$22,836	$1,863,432	$125,806,488	1.3%	0.4% - 2.2%
Hospital based hospice	148	$43,868	$544,290	$125,727,876	8.1%	3.5% - 12.8%
Clinic OPT	88	$4,151	$33,052	$114,887,186	10.8%	2.5% - 19.0%
Clinical Rural Health	302	$2,038	$55,512	$64,083,657	3.6%	1.6% - 5.6%
FQHC	69	$505	$9,860	$60,754,302	5.3%	0.2% - 10.4%
SNF Inpatient Part B	88	$930	$77,636	$33,606,859	1.2%	0.1% - 2.4%
Hospital Other Part B	101	$252	$5,040	$31,864,073	5.0%	2.1% - 7.8%
Home Health (Part B Only)	8	$903	$1,476	$22,675,289	49.9%	(4.8%) - 104.6%
Clinic CORF	76	$9,137	$16,798	$14,278,364	53.5%	38.9% - 68.1%
Hospital Inpatient Part B	45	$1,184	$117,005	$14,060,165	0.8%	(0.1%) - 1.6%
SNF Outpatient	50	$1,668	$35,341	$13,467,557	4.5%	0.2% - 8.7%
All Other Codes	3	$0	$53,192	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**8,506**	**$6,473,720**	**$42,026,993**	**$13,876,730,010**	**7.6%**	**6.6% - 8.5%**

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	3,158	$2,005,355	$55,784,304	$2,048,084,499	3.4%	2.8% - 4.1%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	421	$2,564,993	$5,179,076	$621,800,117	44.7%	38.8% - 50.6%
Percutaneous Intracardiac Procedures W/O MCC (274)	165	$985,516	$3,446,424	$262,133,215	29.1%	21.2% - 37.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	239	$1,226,033	$10,231,862	$203,522,372	11.9%	8.0% - 15.7%
Respiratory Infections & Inflammations W MCC (177)	72	$31,176	$1,246,003	$166,063,118	2.6%	(0.8%) - 6.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	185	$970,346	$9,902,181	$113,691,270	9.8%	5.4% - 14.2%
Infectious & Parasitic Diseases W OR Procedure W MCC (853)	73	$69,612	$2,672,364	$74,567,191	2.4%	0.3% - 4.5%
Degenerative Nervous System Disorders W/O MCC (057)	169	$294,570	$2,097,380	$68,263,440	14.8%	7.4% - 22.2%
Septicemia Or Severe Sepsis W/O MV >96 Hours W MCC (871)	285	$28,403	$4,357,280	$59,294,724	0.7%	(0.3%) - 1.7%
Renal Failure W CC (683)	71	$35,749	$492,710	$52,967,291	8.7%	0.9% - 16.4%
Major Joint/Limb Reattachment Procedure Of Upper Extremities (483)	32	$59,754	$461,780	$44,791,001	12.9%	0.7% - 25.2%
Organic Disturbances & Intellectual Disability (884)	31	$32,980	$421,527	$44,766,291	8.3%	(0.8%) - 17.4%
Kidney & Urinary Tract Infections W/O MCC (690)	31	$12,747	$205,319	$42,149,862	6.6%	(2.3%) - 15.6%
Other Kidney & Urinary Tract Diagnoses W MCC (698)	30	$17,813	$380,059	$41,936,608	4.7%	(1.2%) - 10.7%
Psychoses (885)	76	$11,978	$881,414	$39,965,285	1.5%	(0.8%) - 3.8%
Other Disorders Of Nervous System W CC (092)	34	$63,008	$266,924	$39,199,333	23.2%	7.0% - 39.4%
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes W/O MCC (641)	56	$35,778	$334,227	$38,821,772	9.1%	2.2% - 15.9%
Combined Anterior/Posterior Spinal Fusion W MCC (453)	34	$250,912	$2,422,976	$37,761,006	11.3%	(0.1%) - 22.8%
Cardiac Defibrillator Implant W/O Cardiac Cath W/O MCC (227)	65	$486,168	$2,190,450	$28,395,996	22.6%	11.9% - 33.2%
Other Digestive System Diagnoses W CC (394)	38	$26,075	$257,684	$28,143,661	10.5%	(0.7%) - 21.7%
All Other Codes	3,488	$4,041,717	$83,147,445	$588,200,500	1.9%	1.5% - 2.3%
Total (Part A Hospital IPPS)	**8,753**	**$13,250,684**	**$186,379,390**	**$4,644,518,552**	**3.8%**	**3.4% - 4.3%**

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	**37,508**	**$22,649,411**	**$254,843,526**	**$31,185,543,910**	**7.4%**	**6.8% - 7.9%**

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	5,009	10,437	$8,499	$1,650,934	$100,888,265	0.2%	0.1% - 0.3%
Office o/p est low 20-29 min (99213)	171	175	$278	$13,897	$88,890,712	1.6%	0.2% - 3.0%
Office o/p est sf 10-19 min (99212)	103	103	$293	$5,183	$20,856,739	4.8%	1.0% - 8.6%
Inj pembrolizumab (J9271)	68	68	$10,551	$713,507	$14,412,147	1.5%	(1.5%) - 4.5%
Psytx w pt 45 minutes (90834)	69	97	$281	$7,823	$10,330,545	3.5%	(1.5%) - 8.5%
Sbsq hosp ip/obs moderate 35 (99232)	180	326	$56	$21,118	$8,204,881	0.4%	(0.3%) - 1.0%
Sbsq nf care low mdm 15 (99308)	97	108	$36	$6,640	$4,445,378	0.9%	(0.3%) - 2.1%
Phone e/m phys/qhp 11-20 min (99442)	65	65	$113	$4,935	$3,877,455	2.5%	(0.2%) - 5.2%
Ground mileage (A0425)	357	361	$163	$37,101	$3,789,350	0.5%	(0.3%) - 1.4%
1st hosp ip/obs moderate 55 (99222)	82	82	$62	$10,267	$2,479,107	0.6%	(0.5%) - 1.7%
Inj., rituximab, 10 mg (J9312)	70	80	$5,793	$499,423	$2,425,734	0.9%	(0.9%) - 2.6%
Inj, atezolizumab,10 mg (J9022)	71	71	$9,579	$631,874	$2,119,922	1.5%	(1.4%) - 4.4%
Ppps, subseq visit (G0439)	199	199	$38	$22,576	$1,347,555	0.1%	(0.1%) - 0.4%
1st hosp ip/obs high 75 (99223)	394	396	$77	$71,987	$1,297,755	0.1%	(0.0%) - 0.2%
Eculizumab injection (J1300)	65	65	$7,545	$1,616,927	$926,792	0.5%	(0.4%) - 1.3%
Omalizumab injection (J2357)	70	80	$568	$134,183	$720,844	0.4%	(0.4%) - 1.2%
Chiropract manj 1-2 regions (98940)	77	94	$12	$2,252	$524,398	0.5%	(0.5%) - 1.6%
CT thorax dx c- (71250)	72	73	$16	$4,640	$431,413	0.3%	(0.3%) - 0.9%
Injection,onabotulinumtoxina (J0585)	71	103	$170	$76,225	$381,596	0.2%	(0.2%) - 0.5%
Ther/proph/diag inj sc/im (96372)	227	236	$175	$3,767	$238,835	0.2%	0.1% - 0.4%
All Other Codes	8,559	12,511	$966	$13,977,543	$54,726	0.0%	(0.0%) - 0.0%
Total (Part B)	**12,001**	**25,730**	**$45,273**	**$19,512,803**	**$268,644,148**	**0.2%**	**0.2% - 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
Pneuma/vac walk boot pre ots (L4361)	44	44	$289	$9,508	$1,101,281	3.0%	(3.0%) - 9.0%
Budesonide non-comp unit (J7626)	92	98	$99	$5,756	$955,352	2.5%	(2.4%) - 7.4%
Insulin for insulin pump use (J1817)	93	93	$214	$93,563	$306,715	0.3%	(0.2%) - 0.8%
Ko single upright prefab ots (L1851)	163	201	$759	$101,582	$266,019	0.7%	(0.7%) - 2.1%
All Codes With Less Than 30 Claims	2,556	5,357	$29	$2,894,601	$34,491	0.0%	(0.0%) - 0.0%
Lancets per box (A4259)	286	289	$1	$472	$6,342	0.3%	(0.3%) - 0.8%
All Other Codes	6,476	11,872	$0	$3,818,858	$0	0.0%	0.0% - 0.0%
Total (DMEPOS)	**8,248**	**17,954**	**$1,391**	**$6,924,340**	**$2,670,200**	**0.0%**	**(0.0%) - 0.1%**

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

Part A Excluding Hospital IPPS Services (TOB)	Claims Reviewed	Lines Reviewed	Sample Dollars Underpaid	Total Sample Dollars Paid	Projected Dollars Underpaid	Underpayment Rate	95% Confidence Interval
Hospital Outpatient	2,249	2,249	$10,682	$3,349,962	$191,925,677	0.3%	(0.1%) - 0.6%
Clinic ESRD	616	616	$16,962	$1,863,432	$78,799,152	0.8%	(0.6%) - 2.2%
CAH	270	270	$982	$154,129	$45,346,321	0.7%	(0.2%) - 1.6%
SNF Inpatient	1,500	1,500	$6,000	$11,894,170	$18,566,819	0.1%	0.0% - 0.1%
Nonhospital based hospice	737	737	$344	$2,991,869	$2,441,617	0.0%	(0.0%) - 0.0%
Hospital based hospice	148	148	$508	$544,290	$1,655,793	0.1%	(0.0%) - 0.3%
Clinic OPT	88	88	$21	$33,052	$588,680	0.1%	(0.1%) - 0.2%
FQHC	69	69	$1	$9,860	$85,164	0.0%	(0.0%) - 0.0%
All Other Codes	2,829	2,829	$0	$21,186,230	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**8,506**	**8,506**	**$35,500**	**$42,026,993**	**$339,409,223**	**0.2%**	**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	3,158	3,158	$218,391	$55,784,304	$244,391,876	0.4%	0.2% - 0.6%
Respiratory System Diagnosis W Ventilator Support <=96 Hours (208)	41	41	$19,910	$862,979	$27,629,157	2.7%	(2.5%) - 7.9%
Septicemia Or Severe Sepsis W/O MV >96 Hours W MCC (871)	285	285	$14,592	$4,357,280	$24,419,185	0.3%	(0.1%) - 0.6%
Intracranial Hemorrhage Or Cerebral Infarction W CC Or TPA In 24 Hrs (065)	65	65	$15,229	$517,274	$17,085,189	2.8%	(1.1%) - 6.8%
Hip & Femur Procedures Except Major Joint W CC (481)	71	71	$9,037	$1,198,748	$13,538,818	0.9%	(0.6%) - 2.4%
Simple Pneumonia & Pleurisy W CC (194)	52	52	$11,026	$348,555	$12,525,571	3.0%	(0.7%) - 6.8%
Esophagitis, Gastroent & Misc Digest Disorders W/O MCC (392)	31	31	$3,667	$214,908	$10,579,035	1.6%	(1.6%) - 4.8%
Respiratory Infections & Inflammations W CC (178)	43	43	$7,421	$438,604	$10,258,361	2.3%	(1.6%) - 6.2%
Renal Failure W CC (683)	71	71	$5,473	$492,710	$8,255,767	1.4%	(0.6%) - 3.3%
Respiratory Infections & Inflammations W MCC (177)	72	72	$1,414	$1,246,003	$7,028,064	0.1%	(0.1%) - 0.3%
GI Hemorrhage W CC (378)	69	69	$5,328	$511,200	$6,278,334	1.0%	(0.9%) - 2.9%
Cardiac Arrhythmia & Conduction Disorders W CC (309)	60	60	$4,641	$378,228	$5,813,401	1.3%	(0.5%) - 3.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	239	239	$19,901	$10,231,862	$3,665,514	0.2%	(0.1%) - 0.5%
Extensive OR Procedure Unrelated To Principal Diagnosis W CC (982)	55	55	$14,990	$975,191	$3,204,441	1.6%	(1.5%) - 4.6%
Back & Neck Proc Exc Spinal Fusion W MCC Or Disc Device/Neurostim (518)	48	48	$39,654	$1,260,241	$1,817,584	3.6%	(1.6%) - 8.8%
Other Musculoskelet Sys & Conn Tiss OR Proc W/O CC/MCC (517)	63	63	$10,581	$629,713	$1,327,161	1.8%	(0.4%) - 3.9%
Other Major Cardiovascular Procedures W/O CC/MCC (272)	69	69	$14,240	$1,293,337	$1,108,788	1.2%	(0.6%) - 3.1%
Cardiac Defibrillator Implant W/O Cardiac Cath W/O MCC (227)	65	65	$10,439	$2,190,450	$636,076	0.5%	(0.5%) - 1.5%
Cellulitis W/O MCC (603)	36	36	$426	$216,913	$624,977	0.2%	(0.2%) - 0.7%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	421	421	$1,847	$5,179,076	$576,113	0.0%	(0.0%) - 0.1%
All Other Codes	3,739	3,739	$55,451	$98,051,812	$3,854,360	0.0%	0.0% - 0.0%
Total (Part A Hospital IPPS)	**8,753**	**8,753**	**$483,656**	**$186,379,390**	**$404,617,773**	**0.3%**	**0.2% - 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	**37,508**	**60,943**	**$565,820**	**$254,843,526**	**$1,015,341,344**	**0.2%**	**0.2% - 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 RY2023, the following strata contain sub-strata:

- Home Health
- Hospital Outpatient
- Inpatient Rehab Facility
- Skilled Nursing Facility
- DRGs 469 and 470

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.[20] 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'

[20] 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			
1st hosp ip/obs high 75 (99223)	396	178	44.9%
All Codes With Less Than 30 Claims	10,437	1,476	14.1%
Critical care first hour (99291)	275	64	23.3%
Factor viii recombinant nos (J7192)	476	37	7.8%
Ground mileage (A0425)	361	35	9.7%
Office o/p est mod 30-39 min (99214)	442	72	16.3%
Routine venipuncture (36415)	339	43	12.7%
Sbsq hosp ip/obs high 50 (99233)	648	229	35.3%
Sbsq hosp ip/obs moderate 35 (99232)	322	22	6.8%
Unlisted molecular pathology (81479)	377	54	14.3%
Other	11,633	2,084	17.9%
TOS Code			
All Codes With Less Than 30 Claims	1,828	131	7.2%
Ambulance	737	68	9.2%
Hospital visit - subsequent	1,182	291	24.6%
Lab tests - other (non-Medicare fee schedule)	3,806	876	23.0%
Minor procedures - other (Medicare fee schedule)	2,330	290	12.4%
Office visits - established	967	182	18.8%
Other drugs	2,181	218	10.0%
Other tests - other	787	176	22.4%
Specialist - other	1,392	328	23.6%
Undefined codes	735	17	2.3%
Other	9,761	1,717	17.6%
Resolution Type[21]			
Automated	5,924	310	5.2%
Complex	5	1	20.0%
None	19,772	3,983	20.1%
Routine	5	0	0.0%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,696	262	15.4%
Diseases of arteries, arterioles and capillaries	1,037	64	6.2%
Encounters for other specific health care	719	90	12.5%

[21] 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
Hypertensive diseases	807	211	26.1%
Other dorsopathies	695	149	21.4%
Other forms of heart disease	812	189	23.3%
Persons encountering health services for examinations	1,075	156	14.5%
Persons with potential health hazards related to communicable diseases	743	77	10.4%
Persons with potential health hazards related to family and personal history and certain conditions	1,008	251	24.9%
Symptoms and signs involving the circulatory and respiratory systems	818	147	18.0%
Other	16,296	2,698	16.6%

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	5,357	1,126	21.0%
Lancets per box (A4259)	289	142	49.1%
Nebulizer with compression (E0570)	384	40	10.4%
Oxygen concentrator (E1390)	334	32	9.6%
Parenteral administration ki (B4224)	353	69	19.5%
Parenteral supply kit premix (B4220)	296	66	22.3%
Pos airway press headgear (A7035)	332	51	15.4%
Pos airway pressure filter (A7038)	456	87	19.1%
Ther cgm supply allowance (K0553)	309	29	9.4%
Tubing with heating element (A4604)	307	49	16.0%
Other	9,537	2,282	23.9%
TOS Code			
CPAP	2,786	449	16.1%
Glucose Monitor	818	242	29.6%
Immunosuppressive Drugs	738	149	20.2%
Infusion Pumps & Related Drugs	769	163	21.2%
Lower Limb Orthoses	688	287	41.7%
Lower Limb Prostheses	1,167	85	7.3%
Nebulizers & Related Drugs	1,378	206	14.9%
Parenteral Nutrition	1,249	266	21.3%
Surgical Dressings	881	389	44.2%
Wheelchairs Options/Accessories	1,233	217	17.6%
Other	6,247	1,520	24.3%
Resolution Type[22]			
Automated	3,508	59	1.7%
Complex	23	8	34.8%
None	14,379	3,894	27.1%
Routine	44	12	27.3%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,549	399	25.8%
Cerebral palsy and other paralytic syndromes	518	44	8.5%
Chronic lower respiratory diseases	1,858	271	14.6%
Diabetes mellitus	1,504	476	31.6%
Episodic and paroxysmal disorders	2,871	465	16.2%
In situ neoplasms	379	69	18.2%
Malnutrition	520	54	10.4%
Osteoarthritis	607	266	43.8%
Other disorders of the skin and subcutaneous tissue	616	227	36.9%

[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
Persons with potential health hazards related to family and personal history and certain conditions	2,852	491	17.2%
Other	4,680	1,211	25.9%

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	616	29	4.7%
Clinical Rural Health	302	18	6.0%
CAH	270	62	23.0%
Home Health	1,206	194	16.1%
Hospital Inpatient (Part A)	950	180	18.9%
Hospital Other Part B	101	15	14.9%
Hospital Outpatient	2,249	272	12.1%
Hospital based hospice	148	23	15.5%
Nonhospital based hospice	737	74	10.0%
SNF Inpatient	1,500	447	29.8%
Other	427	91	21.3%
TOS Code			
Clinic ESRD	616	29	4.7%
Clinical Rural Health	302	18	6.0%
CAH	270	62	23.0%
Home Health	1,206	194	16.1%
Hospital Inpatient (Part A)	950	180	18.9%
Hospital Other Part B	101	15	14.9%
Hospital Outpatient	2,249	272	12.1%
Hospital based hospice	148	23	15.5%
Nonhospital based hospice	737	74	10.0%
SNF Inpatient	1,500	447	29.8%
Other	427	91	21.3%
Diagnosis Code			
Acute kidney failure and chronic kidney disease	684	45	6.6%
All Codes With Less Than 30 Claims	556	83	14.9%
Cerebrovascular diseases	406	85	20.9%
Chronic lower respiratory diseases	217	44	20.3%
Diabetes mellitus	289	62	21.5%
Encounters for other specific health care	448	67	15.0%
Hypertensive diseases	385	73	19.0%
No Matching Diagnosis Code Label	269	73	27.1%
Other degenerative diseases of the nervous system	236	28	11.9%
Other forms of heart disease	353	65	18.4%
Other	4,663	780	16.7%

Table N4: Claims in Error: Part A Hospital IPPS

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
DRG Label			
Aftercare W CC/MCC (949)	109	27	24.8%
Aftercare, Musculoskeletal System & Connective Tissue W CC (560)	144	32	22.2%
All Codes With Less Than 30 Claims	3,158	423	13.4%
Degenerative Nervous System Disorders W/O MCC (057)	169	42	24.9%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	185	30	16.2%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	239	43	18.0%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	421	202	48.0%
Percutaneous Intracardiac Procedures W/O MCC (274)	165	47	28.5%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	169	8	4.7%
Septicemia Or Severe Sepsis W/O MV >96 Hours W MCC (871)	285	28	9.8%
Other	3,709	614	16.6%
TOS Code			
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	313	81	25.9%
All Codes With Less Than 30 Claims	1,768	247	14.0%
Cardiac Arrhythmia & Conduction Disorders (308, 309, 310)	142	18	12.7%
Degenerative Nervous System Disorders (056, 057)	200	46	23.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	424	73	17.2%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	157	23	14.6%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	456	208	45.6%
Percutaneous Intracardiac Procedures (273, 274)	178	52	29.2%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	169	8	4.7%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	390	37	9.5%
Other	4,556	703	15.4%
Diagnosis Code			
All Codes With Less Than 30 Claims	364	54	14.8%
Cerebrovascular diseases	303	36	11.9%
Complications of surgical and medical care, not elsewhere classified	666	94	14.1%
Hypertensive diseases	237	28	11.8%
Injuries to the hip and thigh	227	35	15.4%
Ischemic heart diseases	276	33	12.0%
Osteoarthritis	519	231	44.5%
Other bacterial diseases	681	63	9.3%
Other forms of heart disease	960	175	18.2%

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
Spondylopathies	258	54	20.9%
Other	4,262	693	16.3%

Table N5: Frequency of Claims "Included In" and "Excluded From" Paid Claims[23] Improper Payment Rate by Claim Type

Claim Type	Included	Excluded	Total	Percent Included
Part B	12,001	302	12,303	97.5%
DMEPOS	8,248	160	8,408	98.1%
Part A Including Hospital IPPS[24]	17,259	7,340	24,599	70.2%

[23] 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.
[24] 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
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
C.D.E.	Common Bile Duct Exploration
CERT	Comprehensive Error Rate Testing
CGM	Continuous Glucose Monitor
CMG	Case Mix Group
CMS	Centers for Medicare & Medicaid Services
CORF	Comprehensive Outpatient Rehabilitation Facility
COVID	Coronavirus Disease
CPAP	Continuous Positive Airway Pressure
CRNA	Certified Registered Nurse Anesthetist
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics & Supplies
DRG	Diagnosis Related Group
ECMO	Extracorporeal Membrane Oxygenation
E&M or 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
IDT	Interdisciplinary Team
IDTF	Independent Diagnostic Testing Facility
IMRT	Intensity-Modulated Radiation Therapy
IPPS	Inpatient Prospective Payment System
KO	Knee Orthoses
LCD/LCA	Local Coverage Determination/Local Coverage Article
LSO	Lumbar-Sacral Orthosis

Acronym	Definition
MAC	Medicare Administrative Contractor
MCC	Major Complication or Comorbidity
MDM	Medical Decision Making
MRI/MRA	Magnetic Resonance Imaging/Magnetic Resonance Angiography
MS-DRG	Medicare Severity Diagnosis Related Group
MV	Mechanical Ventilation
NCD	National Coverage Determination
NF	Nursing Facility
NOS	Not Otherwise Specified
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
PFS	Physician Fee Schedule
PIIA	Payment Integrity Information Act of 2019
PPPS	Personalized Prevention Plan Services
PPS	Prospective Payment System
QHP	Qualified Healthcare Professional
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