U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

2024 Medicare Fee-for-Service Supplemental Improper Payment Data

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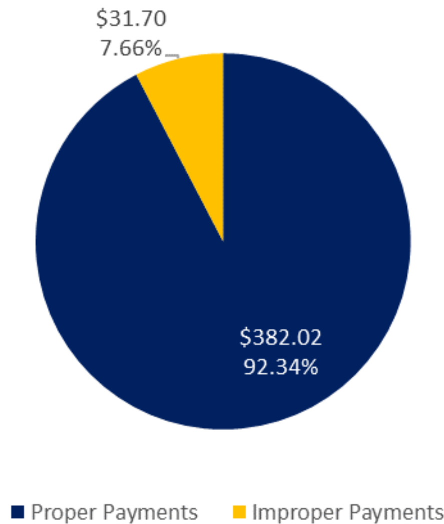
SUMMARY OF HIGH LEVEL FINDINGS

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.

92.34 Percent Accuracy Rate and 7.66 Percent Improper Payment Rate[1,2,3]

Figure 1: Payment Accuracy (in Billions)



[1] HHS published the 2024 Medicare FFS improper payment rate in the Federal FY 2024 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 2024 Medicare FFS improper payment rate included claims submitted during the 12-month period from July 1, 2022 through June 30, 2023.

[2] CMS adjusted the improper payment rate by 0.25 percentage points ($1.03 billion) from 7.91 percent to 7.66 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 2024.

[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 2024 National Improper Payments[4]

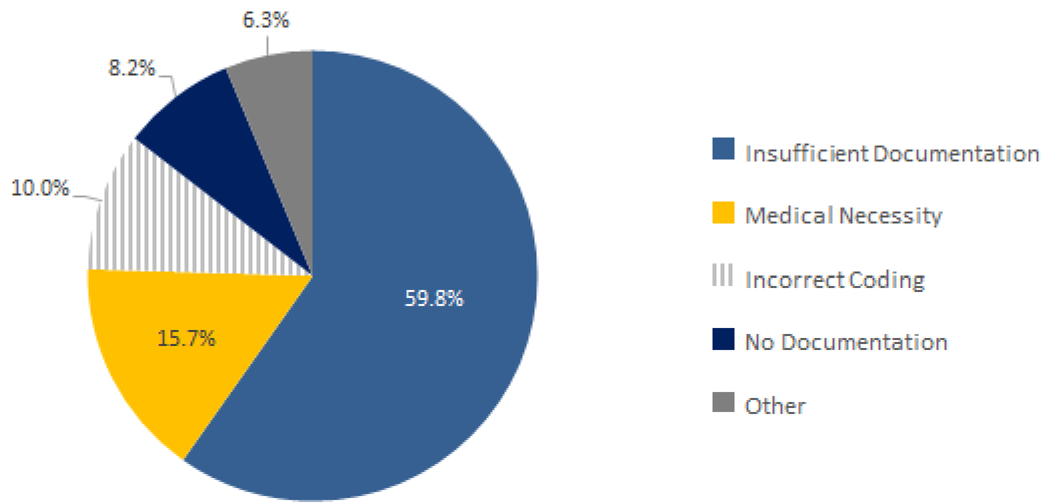
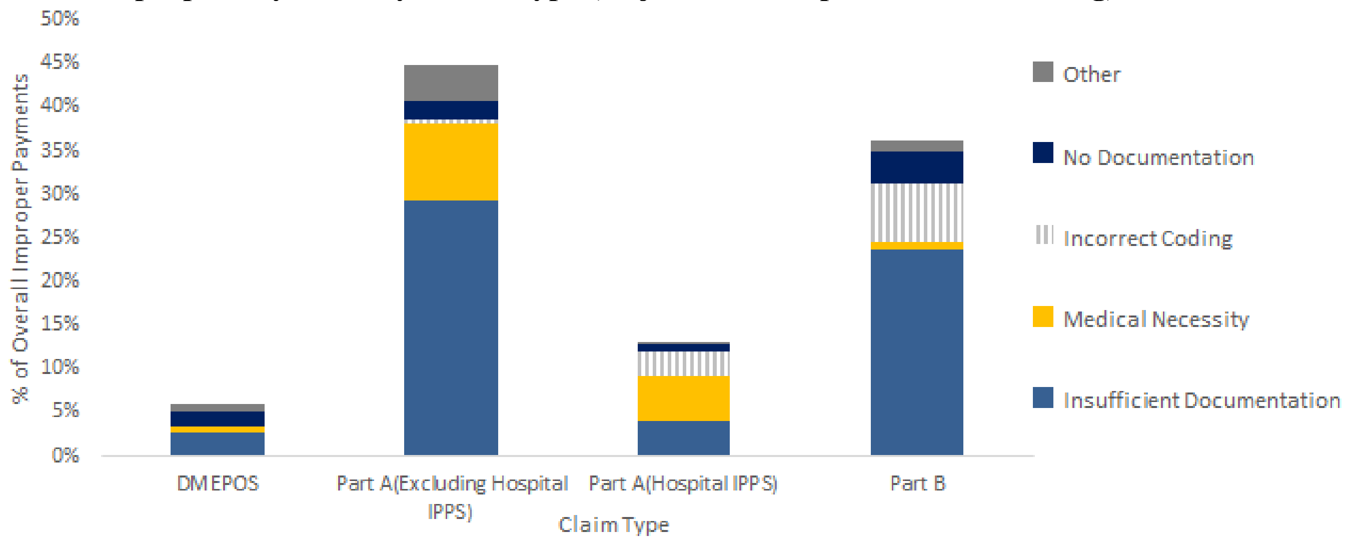


Figure 3: Improper Payment Rate Error Categories by Percentage of 2024 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling)[5]



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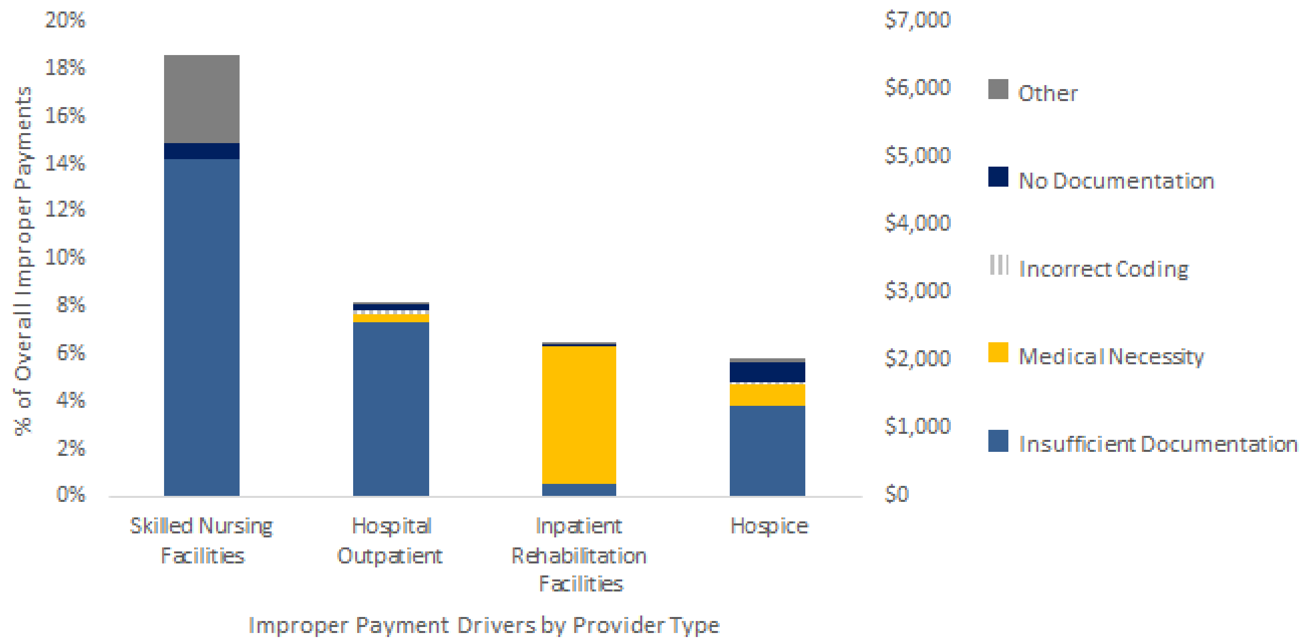
[4] The percentages in this pie chart may not add up to 100 percent due to rounding.

[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 2024 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. Prior to the 2024 reporting period, root causes in Tables 1 through 13 were associated with the primary error listed on the claim or line. Starting with the 2024 reporting period, root causes not associated with the primary error on the claim or line may also be included in these tables.

Figure 4: Improper Payment Rate Error Categories by Percentage of 2024 National Improper Payments and Improper Payments (in Millions) by Improper Payment Drive



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 2024 report period was $5.9 billion, resulting in an improper payment rate of 17.2 percent.

Table 1: Top Root Causes for Skilled Nursing Facility

Root Cause Description	Error Category	Sample Claim Count[6]
Case Mix Group (CMG) component documentation - Missing	Insufficient Documentation	388
HIPPS level changed based on documentation submitted*	Insufficient Documentation	269
Order - Missing	Insufficient Documentation	176
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	80
Documentation to support level of care requirements - Missing	Insufficient Documentation	71
Case Mix Group (CMG) component documentation - Inadequate	Insufficient Documentation	41
Signature log to support a clear identity of an illegible signature - Missing	Insufficient Documentation	39
Other	Other	33
Physician's Certification/Recertification - Missing	Insufficient Documentation	31
Order - Inadequate	Insufficient Documentation	24
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 2024 report period was $2.6 billion, resulting in an improper payment rate of 3.1 percent.

Table 2: Top Root Causes for Hospital Outpatient

Root Cause Description	Error Category	Sample Claim Count
Documentation to support medical necessity - Missing	Insufficient Documentation	57
Order - Missing	Insufficient Documentation	39
Provider's intent to order (for certain services) - Missing	Insufficient Documentation	38
Order - Inadequate	Insufficient Documentation	26
Documentation for the associated diagnostic lab test(s) - Inadequate	Insufficient Documentation	20
Documentation for the billed date of service- Missing	Insufficient Documentation	19
Service code billed is changed to the service provided and/or ordered*	Incorrect Coding	17
Attestation for unsigned documentation - Missing	Insufficient Documentation	16
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	16
Physical/Occupational/Speech Therapy - Certification/Recertification - Missing	Insufficient Documentation	15
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 2024 report period was $2.0 billion, resulting in an improper payment rate of 26.5 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	167
Interdisciplinary team (IDT) meeting notes/records - Missing	Insufficient Documentation	18
Interdisciplinary team (IDT) meeting notes/records - Inadequate	Insufficient Documentation	11
Preadmission screening - Missing	Insufficient Documentation	10
Preadmission screening - Inadequate	Insufficient Documentation	5
Physician/NPP face to face progress notes - Inadequate	Insufficient Documentation	5

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 2024 report period was $1.8 billion, resulting in an improper payment rate of 7.1 percent.

Table 4: Top Root Causes for Hospice

Root Cause Description	Error Category	Sample Claim Count
Physician's Certification/Recertification - Inadequate	Insufficient Documentation	29
Service intensity add-on (SIA) services documentation – Missing*	Insufficient Documentation	17
Physician's Certification/Recertification - Missing	Insufficient Documentation	9
Units of service (UOS) incorrectly coded – Documentation supports higher UOS than billed*	Incorrect Coding	9
Documentation does not support medical necessity for the service or item billed	Medical Necessity	8
Beneficiary election form addendum - Inadequate	Insufficient Documentation	8
Face to face documentation - Missing	Insufficient Documentation	7
Units of service (UOS) incorrectly coded – Documentation supports lower UOS than billed*	Incorrect Coding	7
Beneficiary election form - Inadequate	Insufficient Documentation	6
Beneficiary election form - Missing	Insufficient Documentation	6
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 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	354
Documentation to support medical necessity - Missing	Insufficient Documentation	264
Order - Inadequate	Insufficient Documentation	223
Order - Missing	Insufficient Documentation	148
Result of the diagnostic or laboratory test - Missing	Insufficient Documentation	141
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	126
Documentation to support the services were provided or other documentation required for payment of the code - Missing	Insufficient Documentation	108
LCD/LCA requirements, other documentation required for payment - Missing	Insufficient Documentation	101
Risk assessment for urine drug screen - Missing	Insufficient Documentation	87
Documentation to support frequency of billing - Missing	Insufficient Documentation	79

Table 6: 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	58
Physical/Occupational/Speech Therapy - Required progress report, performed at least once every 10 treatment days - Missing	Insufficient Documentation	26
Physical/Occupational/Speech Therapy - Plan of care - Missing	Insufficient Documentation	23
Physical/Occupational/Speech Therapy - Reason for the delayed physician certification/recertification - Missing	Insufficient Documentation	17
Physical/Occupational/Speech Therapy - Therapy minutes in the treatment note/treatment log - Missing	Insufficient Documentation	16
Physical/Occupational/Speech Therapy - Treatment note/treatment log for the billed date of service - Inadequate	Insufficient Documentation	16
Documentation to support medical necessity - Missing	Insufficient Documentation	13
Physical/Occupational/Speech Therapy - Plan of care - Inadequate	Insufficient Documentation	13
Physical/Occupational/Speech Therapy - Certification/Recertification - Inadequate	Insufficient Documentation	12
Units of service (UOS) incorrectly coded – Documentation supports lower UOS than billed*	Incorrect Coding	12
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 7: 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	179
Documentation supports higher level of E/M service than what was billed*	Incorrect Coding	22
Documentation for the billed date of service - Inadequate	Insufficient Documentation	11
Attestation for unsigned documentation - Missing	Insufficient Documentation	10
Documentation to support the services were provided or other documentation required for payment of the code - Missing	Insufficient Documentation	9
Separately identifiable E/M service documentation - Inadequate	Insufficient Documentation	8
Documentation to support the services were provided or other documentation required for payment of the code - Inadequate	Insufficient Documentation	7
Documentation for the billed date of service- Missing	Insufficient Documentation	7
LCD/LCA requirements, other documentation required for payment - Missing	Insufficient Documentation	7
A separate and identifiable service is not supported as billed (i.e., removal of a modifier as a coding error)*	Incorrect Coding	5
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 Glucose Monitor

Root Cause Description	Error Category	Sample Claim Count
Documentation to support medical necessity of diabetic testing supplies - Missing	Insufficient Documentation	103
Proof of delivery - Inadequate	Insufficient Documentation	27
Documentation to support medical necessity of diabetic testing supplies - Inadequate	Insufficient Documentation	21
The date of delivery was not supported by the submitted documentation	Other	21
Incorrect modifier billed*	Incorrect Coding	15
Order - Missing	Insufficient Documentation	15
Proof of delivery - Missing	Insufficient Documentation	11
Attestation for unsigned documentation - Missing	Insufficient Documentation	11
Refill request - Missing	Insufficient Documentation	10
Modifier changed due to missing documentation*	Insufficient Documentation	7
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Table 9: Top Root Causes for Urological Supplies

Root Cause Description	Error Category	Sample Claim Count
Documentation to support coverage criteria - Inadequate	Insufficient Documentation	37
Base item on the claim is denied therefore the related addition to the base, accessory, or supply fee is denied	Medical Necessity	15
Refill request - Missing	Insufficient Documentation	14
Documentation to support coverage criteria - Missing	Insufficient Documentation	10
Submitted order not written by provider listed on the claim as ordering/referring provider	Other	7
Order - Missing	Insufficient Documentation	7
Attestation for unsigned documentation - Missing	Insufficient Documentation	6
Refill request - Inadequate	Insufficient Documentation	6
Proof of delivery - Missing	Insufficient Documentation	5
Order - Inadequate	Insufficient Documentation	5

Table 10: Top Root Causes for Surgical Dressings

Root Cause Description	Error Category	Sample Claim Count
Wound management documentation - Inadequate	Insufficient Documentation	132
Wound management documentation - Missing	Insufficient Documentation	26
Proof of delivery - Missing	Insufficient Documentation	24
Order - Missing	Insufficient Documentation	19
Units of service (UOS) incorrectly coded – Documentation supports lower UOS than billed*	Incorrect Coding	16
Units of service (UOS) ordered does not support the units of service (UOS) provided and billed*	Insufficient Documentation	13
Beneficiary was in a Medicare Part A inpatient or skilled nursing facility stay; or hospice or home health episode on the billed date of service	Other	12
Proof of delivery - Inadequate	Insufficient Documentation	11
Order - Inadequate	Insufficient Documentation	11
Modifier changed due to missing documentation*	Insufficient Documentation	9
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

Part A (Excluding Hospital IPPS)

The provider types in Part A (Excluding Hospital IPPS) with the highest projected improper payments 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[7]	Medical Necessity	248
Radiographs to support medical necessity for the billed surgical procedure(s) - Missing	Insufficient Documentation	56
Discharge status incorrectly coded*	Incorrect Coding	56
Documentation to support conservative treatment for the billed surgical procedure(s) - Missing	Insufficient Documentation	41
Documentation to support medical necessity for the procedure - Missing*	Insufficient Documentation	21
Preoperative surgeon's office notes - Missing	Insufficient Documentation	14
Documentation to support conservative treatment for the billed surgical procedure(s) - Inadequate	Insufficient Documentation	8
Radiographs to support medical necessity for the billed surgical procedure(s) - Inadequate	Insufficient Documentation	7
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	177
Discharge status incorrectly coded*	Incorrect Coding	15
Documentation to support medical necessity for the procedure – Missing*	Insufficient Documentation	13
NCD requirement(s), other documentation required for payment - Inadequate	Insufficient Documentation	7
Note: Root causes frequently associated with partial improper payments are identified with an asterisk.		

[7] Root cause associated with Part A to B rebilling. See footnote 2 for more information.

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	86
Documentation to support medical necessity for the procedure – Missing*	Insufficient Documentation	37
Discharge status incorrectly coded*	Incorrect Coding	36
NCD requirement(s), other documentation required for payment - Missing	Insufficient Documentation	13
Incorrect secondary diagnosis code- DRG change*	Incorrect Coding	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[8]

Table A1: 2024 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)	35,819	22,006	$294.0	$18.3	6.2%	5.7% - 6.8%	57.8%
Part A (Excluding Hospital IPPS)	9,812	8,506	$187.6	$14.2	7.6%	6.7% - 8.4%	44.8%
Part A (Hospital IPPS)	26,007	13,500	$106.4	$4.1	3.9%	3.6% - 4.2%	13.1%
Part B	17,514	17,000	$110.7	$11.5	10.3%	9.5% - 11.2%	36.1%
DMEPOS	11,369	11,000	$9.0	$1.9	21.4%	19.4% - 23.4%	6.1%
Total	**64,702**	**50,006**	**$413.7**	**$31.7**	**7.7%**	**7.2% - 8.1%**	**100.0%**

Table A2: Comparison of 2023 and 2024 Overall Improper Payment Rates by Error Category (Adjusted for Impact of A/B Rebilling)

Error Category	2023	2024				
	Overall	Overall	Part A Excluding Hospital IPPS	Part A Hospital IPPS	Part B	DMEPOS
No Documentation	0.3%	0.6%	0.2%	0.1%	0.3%	0.1%
Insufficient Documentation	4.6%	4.6%	2.3%	0.3%	1.8%	0.2%
Medical Necessity	1.1%	1.2%	0.7%	0.4%	0.1%	0.0%
Incorrect Coding	0.9%	0.8%	0.0%	0.2%	0.5%	0.0%
Other	0.5%	0.5%	0.3%	0.0%	0.1%	0.1%
Total	**7.4%**	**7.7%**	**3.4%**	**1.0%**	**2.8%**	**0.5%**

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

Table A3: Improper Payment Rate Categories by Percentage of 2024 Overall Improper Payments (Adjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	8.2%
Insufficient Documentation	59.8%
Medical Necessity	15.7%
Incorrect Coding	10.0%
Other	6.3%
Total	**100.0%**

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

Claim Type	Overall Improper Payments			Overpayments		Underpayments	
	Total Amount Paid	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate
Part A (Total)	$294.0	$18.3	6.2%	$17.9	6.1%	$0.5	0.2%
Part A (Excluding Hospital IPPS)	$187.6	$14.2	7.6%	$14.1	7.5%	$0.1	0.1%
Part A (Hospital IPPS)	$106.4	$4.1	3.9%	$3.8	3.6%	$0.3	0.3%
Part B	$110.7	$11.5	10.3%	$11.2	10.1%	$0.2	0.2%
DMEPOS	$9.0	$1.9	21.4%	$1.9	21.3%	$0.0	0.1%
Total	**$413.7**	**$31.7**	**7.7%**	**$31.0**	**7.5%**	**$0.7**	**0.2%**

Table A5: 2024 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	$0.6	$0.0	$0.4	$0.3	$0.9	$0.2	$0.3	$2.6
Insufficient Documentation	$0.9	$0.6	$4.0	$1.5	$5.0	$4.5	$2.5	$19.0
Medical Necessity	$0.2	$0.4	$0.4	$3.7	$0.1	$0.0	$0.2	$5.0
Incorrect Coding	$0.0	$0.0	$0.1	$0.9	$1.8	$0.0	$0.4	$3.2
Other	$0.3	$0.1	$0.1	$0.1	$0.2	$1.2	$0.2	$2.0
Total	**$1.9**	**$1.1**	**$5.0**	**$6.4**	**$8.0**	**$5.9**	**$3.5**	**$31.7**

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

Fiscal Year and Rate Type (Net/Gross)		No Doc Errors	Insufficient Document Errors	Medical Necessity Errors	Incorrect Coding Errors	Other Errors	Improper Payment Rate	Correct Payment Rate
1996[10]	Net	1.9%	4.5%	5.1%	1.2%	1.1%	13.8%	86.2%
1997	Net	2.1%	2.9%	4.2%	1.7%	0.5%	11.4%	88.6%
1998	Net	0.4%	0.8%	3.9%	1.3%	0.7%	7.1%	92.9%
1999	Net	0.6%	2.6%	2.6%	1.3%	0.9%	8.0%	92.0%
2000	Net	1.2%	1.3%	2.9%	1.0%	0.4%	6.8%	93.2%
2001	Net	0.8%	1.9%	2.7%	1.1%	-0.2%	6.3%	93.7%
2002	Net	0.5%	1.3%	3.6%	0.9%	0.0%	6.3%	93.7%
2003	Net	5.4%	2.5%	1.1%	0.7%	0.1%	9.8%	90.2%
2004[11]	Gross	3.1%	4.1%	1.6%	1.2%	0.2%	10.1%	89.9%
2005	Gross	0.7%	1.1%	1.6%	1.5%	0.2%	5.2%	94.8%
2006	Gross	0.6%	0.6%	1.4%	1.6%	0.2%	4.4%	95.6%
2007	Gross	0.6%	0.4%	1.3%	1.5%	0.2%	3.9%	96.1%
2008	Gross	0.2%	0.6%	1.4%	1.3%	0.1%	3.6%	96.4%
2009	Gross	0.2%	4.3%	6.3%	1.5%	0.1%	12.4%	87.6%
2010	Gross	0.1%	4.6%	4.2%	1.6%	0.1%	10.5%	89.5%
2011[12]	Gross	0.2%	4.3%	3.0%	1.0%	0.1%	8.6%	91.4%
2012[13]	Gross	0.2%	5.0%	1.9%	1.3%	0.1%	8.5%	91.5%
2013	Gross	0.2%	6.1%	2.2%	1.5%	0.2%	10.1%	89.9%
2014	Gross	0.1%	8.2%	2.7%	1.6%	0.2%	12.7%	87.3%
2015	Gross	0.2%	8.1%	2.1%	1.3%	0.4%	12.09%	87.91%
2016	Gross	0.1%	7.2%	2.2%	1.1%	0.4%	11.00%	89.00%
2017	Gross	0.2%	6.1%	1.7%	1.2%	0.3%	9.51%	90.49%
2018	Gross	0.2%	4.7%	1.7%	1.0%	0.5%	8.12%	91.88%
2019	Gross	0.1%	4.3%	1.4%	1.0%	0.4%	7.25%	92.75%
2020	Gross	0.3%	4.0%	1.0%	0.7%	0.3%	6.27%	93.73%
2021	Gross	0.3%	4.0%	0.8%	0.7%	0.4%	6.26%	93.74%
2022	Gross	0.3%	4.7%	1.0%	0.8%	0.6%	7.46%	92.54%
2023	Gross	0.3%	4.6%	1.1%	0.9%	0.5%	7.38%	92.62%
2024	Gross	0.6%	4.6%	1.2%	0.8%	0.5%	7.66%	92.34%

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

[10] FY 1996-2003 improper payments were calculated as Overpayments – Underpayments.

[11] FY 2004-2024 improper payments were calculated as Overpayments + Underpayments.

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

[13] The FY 2012-2024 improper payment rates reported in this table are adjusted for the impact of denied Part A inpatient claims under Part B.

Table A7: 2024 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	11,000	$9.0	$1.9	21.4%	19.4% - 23.4%	6.1%
Home Health & Hospice	2,149	$41.9	$2.9	6.9%	5.5% - 8.4%	9.2%
Parts A & B (Excluding Home Health & Hospice)	36,857	$362.8	$26.9	7.4%	6.9% - 7.9%	84.8%
Total	**50,006**	**$413.7**	**$31.7**	**7.7%**	**7.2% - 8.1%**	**100.0%**

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

Table B1: 2024 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)	35,819	22,006	$294.0	$19.4	6.6%	6.0% - 7.1%	59.1%
Part A (Excluding Hospital IPPS)	9,812	8,506	$187.6	$14.2	7.6%	6.7% - 8.4%	43.4%
Part A (Hospital IPPS)	26,007	13,500	$106.4	$5.2	4.9%	4.5% - 5.3%	15.8%
Part B	17,514	17,000	$110.7	$11.5	10.3%	9.5% - 11.2%	35.0%
DMEPOS	11,369	11,000	$9.0	$1.9	21.4%	19.4% - 23.4%	5.9%
Total	**64,702**	**50,006**	**$413.7**	**$32.7**	**7.9%**	**7.5% - 8.4%**	**100.0%**

Table B2: Comparison of 2023 and 2024 Overall Improper Payment Rates by Error Category (Unadjusted for Impact of A/B Rebilling)

Error Category	2023	2024				
	Overall	Overall	Part A Excluding Hospital IPPS	Part A Hospital IPPS	Part B	DMEPOS
No Documentation	0.3%	0.6%	0.2%	0.1%	0.3%	0.1%
Insufficient Documentation	4.6%	4.6%	2.3%	0.3%	1.8%	0.2%
Medical Necessity	1.3%	1.5%	0.7%	0.6%	0.1%	0.0%
Incorrect Coding	0.9%	0.8%	0.0%	0.2%	0.5%	0.0%
Other	0.5%	0.5%	0.3%	0.0%	0.1%	0.1%
Total	**7.6%**	**7.9%**	**3.4%**	**1.2%**	**2.8%**	**0.5%**

Table B3: Improper Payment Rate Categories by Percentage of 2024 Overall Improper Payments (Unadjusted for Impact of A/B Rebilling)

Error Category	Percent of Overall Improper Payments
No Documentation	8.0%
Insufficient Documentation	57.9%
Medical Necessity	18.3%
Incorrect Coding	9.7%
Other	6.1%
Total	**100.0%**

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

Claim Type	Overall Improper Payments			Overpayments		Underpayments	
	Total Amount Paid	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate
Part A (Total)	$294.0	$19.4	6.6%	$18.9	6.4%	$0.5	0.2%
Part A (Excluding Hospital IPPS)	$187.6	$14.2	7.6%	$14.1	7.5%	$0.1	0.1%
Part A (Hospital IPPS)	$106.4	$5.2	4.9%	$4.8	4.5%	$0.3	0.3%
Part B	$110.7	$11.5	10.3%	$11.2	10.1%	$0.2	0.2%
DMEPOS	$9.0	$1.9	21.4%	$1.9	21.3%	$0.0	0.1%
Total	**$413.7**	**$32.7**	**7.9%**	**$32.0**	**7.7%**	**$0.7**	**0.2%**

Table B5: 2024 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	$0.6	$0.0	$0.4	$0.3	$0.9	$0.2	$0.3	$2.6
Insufficient Documentation	$0.9	$0.6	$4.0	$1.5	$5.0	$4.5	$2.5	$19.0
Medical Necessity	$0.2	$0.4	$0.4	$4.7	$0.1	$0.0	$0.2	$6.0
Incorrect Coding	$0.0	$0.0	$0.1	$0.9	$1.8	$0.0	$0.4	$3.2
Other	$0.3	$0.1	$0.1	$0.1	$0.2	$1.2	$0.2	$2.0
Total	**$1.9**	**$1.1**	**$5.0**	**$7.4**	**$8.0**	**$5.9**	**$3.5**	**$32.7**

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

Fiscal Year and Rate Type (Net/Gross)		No Doc Errors	Insufficient Document Errors	Medical Necessity Errors	Incorrect Coding Errors	Other Errors	Improper Payment Rate	Correct Payment Rate
1996[15]	Net	1.9%	4.5%	5.1%	1.2%	1.1%	13.8%	86.2%
1997	Net	2.1%	2.9%	4.2%	1.7%	0.5%	11.4%	88.6%
1998	Net	0.4%	0.8%	3.9%	1.3%	0.7%	7.1%	92.9%
1999	Net	0.6%	2.6%	2.6%	1.3%	0.9%	8.0%	92.0%
2000	Net	1.2%	1.3%	2.9%	1.0%	0.4%	6.8%	93.2%
2001	Net	0.8%	1.9%	2.7%	1.1%	-0.2%	6.3%	93.7%
2002	Net	0.5%	1.3%	3.6%	0.9%	0.0%	6.3%	93.7%
2003	Net	5.4%	2.5%	1.1%	0.7%	0.1%	9.8%	90.2%
2004[16]	Gross	3.1%	4.1%	1.6%	1.2%	0.2%	10.1%	89.9%
2005	Gross	0.7%	1.1%	1.6%	1.5%	0.2%	5.2%	94.8%
2006	Gross	0.6%	0.6%	1.4%	1.6%	0.2%	4.4%	95.6%
2007	Gross	0.6%	0.4%	1.3%	1.5%	0.2%	3.9%	96.1%
2008	Gross	0.2%	0.6%	1.4%	1.3%	0.1%	3.6%	96.4%
2009	Gross	0.2%	4.3%	6.3%	1.5%	0.1%	12.4%	87.6%
2010	Gross	0.1%	4.6%	4.2%	1.6%	0.1%	10.5%	89.5%
2011	Gross	0.2%	5.0%	3.4%	1.2%	0.1%	9.9%	90.1%
2012	Gross	0.2%	5.0%	2.6%	1.3%	0.1%	9.3%	90.7%
2013	Gross	0.2%	6.1%	2.8%	1.5%	0.2%	10.7%	89.3%
2014	Gross	0.1%	8.2%	3.6%	1.6%	0.2%	13.6%	86.4%
2015	Gross	0.2%	8.2%	2.5%	1.3%	0.4%	12.47%	87.53%
2016	Gross	0.1%	7.2%	2.4%	1.1%	0.4%	11.19%	88.81%
2017	Gross	0.2%	6.1%	1.8%	1.2%	0.3%	9.64%	90.36%
2018	Gross	0.2%	4.7%	1.9%	1.0%	0.5%	8.27%	91.73%
2019	Gross	0.1%	4.3%	1.6%	1.0%	0.4%	7.45%	92.55%
2020	Gross	0.3%	4.0%	1.3%	0.7%	0.3%	6.56%	93.44%
2021	Gross	0.3%	4.0%	1.0%	0.7%	0.4%	6.44%	93.56%
2022	Gross	0.3%	4.7%	1.2%	0.8%	0.6%	7.63%	92.37%
2023	Gross	0.3%	4.6%	1.3%	0.9%	0.5%	7.61%	92.39%
2024	Gross	0.6%	4.6%	1.5%	0.8%	0.5%	7.91%	92.09%

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

[15] FY 1996-2003 improper payments were calculated as Overpayments – Underpayments.

[16] FY 2004-2024 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	**50,006**	**7.9%**	**$32.7**	**100.0%**
Overall Part A (Hospital IPPS)	**13,500**	**4.9%**	**$5.2**	**15.8%**
0 or 1 day	2,094	24.3%	$1.7	5.2%
2 days	2,105	8.2%	$0.9	2.8%
3 days	1,978	6.2%	$0.8	2.4%
4 days	1,541	3.5%	$0.4	1.2%
5 days	1,077	3.2%	$0.3	0.8%
More than 5 days	4,705	1.9%	$1.1	3.3%

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

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

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
CA	6,331	$4,019.5	8.4%	7.1% - 9.6%	12.3%
FL	3,864	$2,829.0	8.8%	7.4% - 10.3%	8.6%
TX	3,503	$2,392.0	7.9%	6.5% - 9.3%	7.3%
NY	2,860	$2,041.2	7.1%	5.3% - 9.0%	6.2%
PA	2,200	$1,477.4	9.2%	7.2% - 11.1%	4.5%
OH	1,758	$1,459.9	10.4%	6.9% - 13.8%	4.5%
IL	2,114	$1,397.4	8.2%	5.9% - 10.5%	4.3%
NJ	1,528	$1,052.3	8.5%	6.2% - 10.8%	3.2%
GA	1,303	$1,048.2	9.7%	6.5% - 12.8%	3.2%
MD	1,213	$955.4	7.1%	3.9% - 10.3%	2.9%
AZ	1,111	$878.4	13.1%	9.4% - 16.9%	2.7%
NC	1,547	$843.2	7.9%	5.5% - 10.3%	2.6%
MA	1,366	$793.7	6.2%	4.0% - 8.4%	2.4%
KY	722	$785.3	15.3%	6.8% - 23.9%	2.4%
CO	655	$777.1	14.0%	7.0% - 21.1%	2.4%
MI	1,262	$686.5	6.3%	4.5% - 8.0%	2.1%
TN	1,269	$685.4	7.0%	4.3% - 9.7%	2.1%
VA	1,271	$638.5	5.7%	3.7% - 7.7%	2.0%
SC	817	$633.1	10.7%	6.7% - 14.8%	1.9%
AL	713	$594.1	10.1%	5.9% - 14.4%	1.8%
MO	926	$554.4	8.3%	5.0% - 11.6%	1.7%
OK	761	$492.6	8.4%	5.3% - 11.4%	1.5%
KS	676	$480.9	6.4%	1.2% - 11.5%	1.5%
IN	961	$464.9	6.6%	4.4% - 8.7%	1.4%
AR	555	$433.1	10.2%	5.9% - 14.5%	1.3%
WA	905	$410.4	4.9%	2.9% - 7.0%	1.3%
LA	740	$407.6	6.9%	4.2% - 9.6%	1.3%
MS	539	$298.0	8.4%	4.8% - 12.0%	0.9%
UT	393	$294.9	7.6%	0.7% - 14.5%	0.9%
WI	729	$291.1	4.5%	1.5% - 7.4%	0.9%
NV	399	$281.4	8.6%	4.5% - 12.6%	0.9%
NM	256	$263.5	13.3%	5.7% - 21.0%	0.8%
MN	755	$238.2	3.9%	2.1% - 5.8%	0.7%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
IA	536	$221.2	6.3%	3.3% - 9.2%	0.7%
NE	336	$158.0	5.0%	2.2% - 7.7%	0.5%
WV	302	$145.6	6.4%	2.4% - 10.4%	0.4%
CT	408	$140.4	2.7%	1.1% - 4.4%	0.4%
DE	188	$140.3	10.4%	4.1% - 16.8%	0.4%
OR	381	$131.2	4.2%	2.2% - 6.2%	0.4%
NH	245	$119.8	4.5%	0.6% - 8.4%	0.4%
AK	106	$118.0	8.8%	(0.7%) - 18.4%	0.4%
HI	115	$115.1	8.9%	(1.7%) - 19.5%	0.4%
WY	112	$109.3	13.1%	(0.3%) - 26.6%	0.3%
MT	166	$75.3	4.5%	1.5% - 7.4%	0.2%
ID	235	$72.4	3.7%	0.7% - 6.8%	0.2%
RI	110	$60.5	5.4%	1.1% - 9.7%	0.2%
PR	65	$45.9	10.5%	(2.3%) - 23.2%	0.1%
SD	192	$42.0	2.2%	0.4% - 4.0%	0.1%
DC	80	$41.5	8.6%	2.8% - 14.4%	0.1%
ME	149	$29.5	2.8%	0.3% - 5.4%	0.1%
ND	144	$25.6	2.9%	0.8% - 5.0%	0.1%
VT	108	$15.5	1.9%	0.2% - 3.6%	0.1%
All States	**50,006**	**$32,733.4**	**7.9%**	**7.5% - 8.4%**	**100.0%**

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

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
CA	5,026	$3,234.7	8.1%	6.8% - 9.4%	9.9%
FL	2,858	$2,348.9	8.8%	7.2% - 10.4%	7.2%
TX	2,533	$2,016.1	8.0%	6.4% - 9.5%	6.2%
NY	2,203	$1,826.1	6.8%	4.8% - 8.7%	5.6%
PA	1,660	$1,295.2	8.9%	6.8% - 10.9%	4.0%
OH	1,296	$1,218.7	10.2%	6.4% - 14.0%	3.7%
IL	1,556	$1,153.6	7.7%	5.3% - 10.1%	3.5%
NJ	1,142	$1,016.3	9.0%	6.4% - 11.5%	3.1%
GA	960	$993.8	10.2%	6.7% - 13.7%	3.0%
MD	909	$874.7	6.9%	3.5% - 10.2%	2.7%
MA	1,076	$748.8	6.5%	4.1% - 8.9%	2.3%
NC	1,161	$737.2	7.8%	5.4% - 10.2%	2.3%
KY	475	$730.9	16.4%	6.7% - 26.2%	2.2%
CO	451	$705.9	14.7%	6.7% - 22.7%	2.2%
AZ	851	$700.3	12.1%	8.4% - 15.8%	2.1%
TN	949	$615.6	6.9%	4.0% - 9.8%	1.9%
VA	908	$581.1	5.7%	3.5% - 7.9%	1.8%
MI	913	$573.3	5.9%	4.0% - 7.7%	1.8%
SC	554	$541.3	11.3%	6.9% - 15.6%	1.7%
MO	627	$508.7	9.1%	5.2% - 13.0%	1.6%
KS	514	$440.4	6.2%	0.8% - 11.6%	1.4%
AL	513	$436.6	8.9%	5.1% - 12.6%	1.3%
AR	385	$393.7	10.5%	5.8% - 15.3%	1.2%
LA	512	$373.6	8.0%	4.6% - 11.4%	1.1%
IN	665	$356.9	5.8%	3.8% - 7.8%	1.1%
OK	518	$356.3	7.0%	4.2% - 9.8%	1.1%
WA	649	$355.9	4.8%	2.5% - 7.0%	1.1%
MS	365	$265.1	8.5%	4.5% - 12.6%	0.8%
WI	528	$248.4	4.2%	1.0% - 7.5%	0.8%
NM	164	$236.2	13.4%	4.9% - 21.9%	0.7%
NV	290	$219.9	8.1%	3.5% - 12.7%	0.7%
IA	365	$179.3	5.7%	2.6% - 8.7%	0.6%
MN	529	$175.7	3.4%	1.5% - 5.3%	0.5%
UT	267	$143.1	4.6%	0.1% - 9.0%	0.4%
NE	241	$140.1	4.7%	1.8% - 7.6%	0.4%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
WV	215	$129.5	6.2%	1.9% - 10.5%	0.4%
CT	295	$125.4	2.6%	0.9% - 4.3%	0.4%
NH	186	$109.8	4.3%	0.3% - 8.4%	0.3%
OR	266	$106.5	3.9%	1.7% - 6.1%	0.3%
DE	132	$103.1	9.2%	3.5% - 14.9%	0.3%
WY	64	$100.2	13.5%	(1.5%) - 28.4%	0.3%
AK	84	$62.9	5.2%	(0.6%) - 11.1%	0.2%
ID	156	$60.6	3.6%	0.2% - 7.0%	0.2%
MT	110	$56.4	3.6%	0.9% - 6.2%	0.2%
RI	87	$54.0	5.2%	0.8% - 9.6%	0.2%
PR	44	$44.7	14.7%	(2.9%) - 32.3%	0.1%
HI	96	$41.9	3.9%	0.8% - 6.9%	0.1%
DC	54	$37.7	8.3%	2.3% - 14.4%	0.1%
SD	147	$36.3	2.0%	0.2% - 3.8%	0.1%
ME	97	$25.7	2.7%	(0.1%) - 5.4%	0.1%
ND	111	$21.5	2.6%	0.4% - 4.7%	0.1%
VT	77	$13.6	1.7%	0.1% - 3.4%	0.0%
All States	**36,857**	**$27,899.7**	**7.7%**	**7.2% - 8.2%**	**85.2%**

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	854	$345.3	38.2%	24.9% - 51.5%	1.1%
TX	661	$138.6	23.3%	17.2% - 29.5%	0.4%
CA	978	$112.8	15.3%	11.3% - 19.3%	0.3%
NY	595	$112.6	23.3%	15.5% - 31.1%	0.3%
OH	376	$89.4	32.4%	21.0% - 43.7%	0.3%
PA	479	$86.9	24.1%	16.0% - 32.2%	0.3%
IL	457	$86.5	23.3%	14.8% - 31.9%	0.3%
MI	303	$81.3	32.8%	21.6% - 44.0%	0.3%
MD	280	$72.8	34.7%	20.1% - 49.4%	0.2%
KY	221	$52.7	29.5%	18.3% - 40.6%	0.2%
VA	315	$44.0	20.6%	12.1% - 29.2%	0.1%
NC	344	$42.7	16.0%	9.7% - 22.3%	0.1%
MA	251	$36.6	19.1%	9.8% - 28.4%	0.1%
NJ	356	$36.0	17.3%	9.1% - 25.5%	0.1%
GA	286	$35.2	19.6%	12.5% - 26.6%	0.1%
AR	153	$34.4	24.4%	5.3% - 43.6%	0.1%
MO	258	$33.5	12.8%	4.6% - 21.0%	0.1%
TN	295	$30.9	14.8%	9.1% - 20.5%	0.1%
AZ	217	$28.2	14.3%	7.7% - 20.9%	0.1%
IN	256	$27.8	10.5%	3.0% - 18.1%	0.1%
OR	103	$24.7	30.5%	16.1% - 45.0%	0.1%
AL	164	$24.6	22.7%	9.6% - 35.8%	0.1%
SC	227	$24.5	14.0%	7.8% - 20.2%	0.1%
KS	134	$24.2	24.5%	10.1% - 38.8%	0.1%
WI	180	$23.4	19.6%	11.0% - 28.3%	0.1%
CO	182	$22.3	12.5%	3.5% - 21.5%	0.1%
OK	172	$22.3	15.3%	6.6% - 24.0%	0.1%
LA	163	$20.4	15.8%	8.8% - 22.8%	0.1%
MS	152	$19.5	15.0%	7.6% - 22.5%	0.1%
WA	224	$18.5	9.7%	4.8% - 14.6%	0.1%
NE	88	$17.9	18.9%	3.4% - 34.4%	0.1%
MN	193	$15.5	9.7%	3.7% - 15.7%	0.1%
NM	79	$15.3	20.4%	9.0% - 31.9%	0.1%
NV	72	$15.2	16.9%	(2.8%) - 36.7%	0.1%
IA	153	$13.0	11.7%	4.3% - 19.0%	0.0%

State	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
UT	102	$12.7	14.2%	0.3% - 28.1%	0.0%
ID	65	$11.7	18.5%	(1.1%) - 38.1%	0.0%
WV	76	$10.1	19.5%	5.9% - 33.1%	0.0%
CT	103	$8.5	14.2%	5.1% - 23.3%	0.0%
DE	47	$7.5	15.6%	3.6% - 27.5%	0.0%
NH	56	$7.2	25.0%	5.9% - 44.1%	0.0%
MT	52	$6.3	22.4%	5.7% - 39.2%	0.0%
SD	37	$5.6	28.0%	(5.0%) - 61.0%	0.0%
ND	32	$4.1	11.0%	(3.4%) - 25.4%	0.0%
WY	42	$4.0	8.9%	(1.8%) - 19.6%	0.0%
ME	50	$3.8	9.9%	1.9% - 18.0%	0.0%
VT	31	$1.9	7.5%	(5.2%) - 20.3%	0.0%
All States (Incl. States Not Listed)	**11,000**	**$1,921.5**	**21.4%**	**19.4% - 23.4%**	**5.9%**

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	327	$672.0	9.0%	4.8% - 13.1%	2.1%
TX	309	$237.4	5.5%	2.1% - 8.8%	0.7%
IL	101	$157.4	9.3%	1.8% - 16.9%	0.5%
OH	86	$151.8	8.4%	(0.3%) - 17.1%	0.5%
AZ	43	$149.9	21.0%	2.7% - 39.4%	0.5%
FL	152	$134.8	3.0%	(0.3%) - 6.2%	0.4%
AL	36	$132.8	15.8%	(3.0%) - 34.7%	0.4%
OK	71	$114.1	18.2%	3.9% - 32.4%	0.4%
NY	62	$102.4	8.2%	0.2% - 16.3%	0.3%
PA	61	$95.3	8.4%	(1.8%) - 18.6%	0.3%
IN	40	$80.2	12.0%	(0.1%) - 24.1%	0.3%
SC	36	$67.2	7.3%	(5.6%) - 20.2%	0.2%
NC	42	$63.2	6.6%	(5.7%) - 18.9%	0.2%
MN	33	$47.0	6.8%	(1.2%) - 14.8%	0.1%
NV	37	$46.3	9.5%	1.2% - 17.8%	0.1%
WA	32	$36.1	5.4%	(0.4%) - 11.2%	0.1%
MI	46	$31.9	3.6%	0.0% - 7.2%	0.1%
GA	57	$19.1	2.2%	(1.0%) - 5.4%	0.1%
LA	65	$13.7	1.2%	(0.4%) - 2.9%	0.0%
VA	48	$13.3	1.7%	(1.3%) - 4.7%	0.0%
MO	41	$12.3	1.5%	(1.2%) - 4.2%	0.0%
MA	39	$8.3	0.9%	(0.5%) - 2.2%	0.0%
All States (Incl. States Not Listed)	**2,149**	**$2,912.2**	**6.9%**	**5.5% - 8.4%**	**8.9%**

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
Esrd home pt serv p mo 20+ (90966)	$290.3	72.2%	65.9% - 78.5%
Transj care mgmt high f2f 7d (99496)	$279.6	60.4%	52.0% - 68.7%
Radiation tx delivery imrt (G6015)	$355.5	25.0%	15.4% - 34.6%
Remote 30 day ecg tech supp (93229)	$812.9	21.7%	16.1% - 27.4%

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

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

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

Part B Services (BETOS Codes)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percentage of Service Type Improper Payments by Type of Error					Percent of Overall Improper Payments
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other	
Lab tests - other (non-Medicare fee schedule)	$1,257,513,270	27.2%	24.0% - 30.4%	5.1%	87.7%	4.7%	1.1%	1.4%	3.8%
Minor procedures - other (Medicare fee schedule)	$1,105,993,509	18.5%	12.5% - 24.5%	5.1%	91.6%	0.2%	1.9%	1.2%	3.4%
Office visits - established	$1,077,121,456	5.5%	4.4% - 6.6%	18.7%	19.6%	0.0%	61.6%	0.1%	3.3%
Specialist - other	$899,714,485	31.3%	25.9% - 36.8%	3.1%	91.3%	0.0%	3.4%	2.2%	2.7%
Hospital visit - subsequent	$744,651,796	13.6%	10.4% - 16.8%	12.5%	33.4%	0.0%	50.0%	4.0%	2.3%
Ambulance	$595,144,661	13.2%	7.6% - 18.8%	0.0%	63.5%	27.5%	1.0%	8.0%	1.8%
Hospital visit - initial	$404,839,595	16.3%	14.0% - 18.7%	5.7%	34.8%	0.0%	56.7%	2.8%	1.2%
Major procedure - Other	$376,640,674	16.0%	2.9% - 29.1%	0.2%	87.4%	0.0%	12.4%	0.0%	1.2%
Other tests - other	$354,610,153	24.0%	13.7% - 34.3%	0.6%	96.1%	0.0%	0.1%	3.2%	1.1%
Nursing home visit	$296,848,340	13.4%	10.2% - 16.6%	25.7%	28.5%	0.0%	44.2%	1.6%	0.9%
Eye procedure - cataract removal/lens insertion	$296,715,219	14.4%	8.1% - 20.7%	8.5%	90.6%	0.0%	0.3%	0.6%	0.9%
Ambulatory procedures - other	$290,839,660	36.6%	23.1% - 50.1%	10.7%	87.4%	0.0%	1.3%	0.5%	0.9%
Office visits - new	$268,205,732	7.2%	5.1% - 9.4%	7.5%	7.4%	0.0%	64.8%	20.3%	0.8%
Specialist - psychiatry	$254,537,463	16.1%	9.4% - 22.8%	17.0%	78.3%	0.1%	2.6%	2.0%	0.8%
Emergency room visit	$227,013,887	11.0%	8.7% - 13.2%	12.6%	16.4%	0.0%	67.3%	3.6%	0.7%
Hospital visit - critical care	$213,361,085	17.2%	12.5% - 21.9%	12.6%	20.5%	0.0%	66.1%	0.7%	0.7%
Chiropractic	$178,324,416	33.6%	24.8% - 42.4%	2.4%	95.5%	0.6%	0.7%	0.9%	0.5%
Other drugs	$173,559,512	1.6%	0.9% - 2.3%	6.5%	81.6%	2.0%	7.1%	2.8%	0.5%
Dialysis services (Medicare Fee Schedule)	$159,952,861	21.6%	12.1% - 31.1%	13.4%	82.9%	0.0%	1.0%	2.7%	0.5%
Ambulatory procedures - skin	$157,646,686	6.6%	3.1% - 10.1%	6.3%	70.6%	0.0%	22.6%	0.5%	0.5%
All Type of Services (Incl. Codes Not Listed)	**$11,452,231,470**	**10.3%**	**9.5% - 11.2%**	**10.2%**	**65.3%**	**2.8%**	**18.5%**	**3.2%**	**35.0%**

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	
Glucose Monitor	$278,458,137	25.2%	20.3% - 30.1%	67.6%	26.6%	0.0%	0.0%	5.8%	0.9%
Urological Supplies	$257,761,158	45.2%	35.4% - 55.1%	80.2%	16.0%	0.4%	0.2%	3.2%	0.8%
Surgical Dressings	$176,907,941	57.6%	51.8% - 63.3%	48.6%	43.8%	0.4%	1.3%	5.8%	0.5%
CPAP	$146,106,081	12.5%	9.5% - 15.5%	0.2%	71.2%	9.0%	0.3%	19.3%	0.4%
Wheelchairs Options/Accessories	$105,842,955	35.4%	3.6% - 67.1%	0.0%	3.9%	95.3%	0.0%	0.9%	0.3%
Lower Limb Orthoses	$91,221,893	35.2%	27.3% - 43.2%	29.6%	39.5%	8.6%	0.0%	22.2%	0.3%
Infusion Pumps & Related Drugs	$89,453,268	14.1%	8.8% - 19.4%	1.1%	72.5%	6.9%	2.2%	17.3%	0.3%
Parenteral Nutrition	$81,850,376	33.0%	26.6% - 39.5%	1.3%	69.4%	9.5%	0.1%	19.7%	0.3%
Oxygen Supplies/Equipment	$81,010,316	11.3%	8.4% - 14.3%	3.6%	59.3%	0.0%	0.0%	37.0%	0.2%
All Policy Groups with Less than 30 Claims	$65,631,873	17.7%	7.8% - 27.6%	8.2%	56.9%	8.6%	0.2%	26.1%	0.2%
Ventilators	$63,509,812	13.3%	10.2% - 16.4%	4.2%	66.5%	0.0%	0.0%	29.3%	0.2%
LSO	$47,835,412	54.4%	45.1% - 63.6%	20.1%	64.4%	0.3%	0.0%	15.1%	0.1%
Immunosuppressive Drugs	$45,367,022	23.2%	15.0% - 31.5%	15.1%	40.3%	10.9%	0.6%	33.1%	0.1%
Upper Limb Orthoses	$43,651,656	40.3%	32.2% - 48.4%	35.6%	56.4%	1.4%	0.0%	6.6%	0.1%
Nebulizers & Related Drugs	$42,203,134	7.1%	3.8% - 10.3%	2.9%	53.9%	19.1%	0.1%	24.1%	0.1%
Pneumatic Compression Device	$37,724,521	61.5%	49.0% - 74.0%	0.0%	62.9%	37.1%	0.0%	0.0%	0.1%
Diabetic Shoes	$35,744,692	47.1%	32.6% - 61.5%	0.0%	85.5%	0.0%	0.0%	14.5%	0.1%
Ostomy Supplies	$34,189,034	16.2%	10.5% - 22.0%	0.7%	66.4%	1.3%	0.0%	31.6%	0.1%
Enteral Nutrition	$31,147,126	23.8%	16.9% - 30.7%	0.0%	48.8%	27.6%	0.0%	23.6%	0.1%
Wheelchairs Manual	$28,149,410	30.5%	23.2% - 37.8%	0.0%	79.7%	0.0%	0.0%	20.3%	0.1%
All Type of Services (Incl. Codes Not Listed)	**$1,921,481,880**	**21.4%**	**19.4% - 23.4%**	**29.2%**	**46.1%**	**10.1%**	**0.3%**	**14.3%**	**5.9%**

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

Part A Excluding Hospital IPPS Services (TOB)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percentage of Service Type Improper Payments by Type of Error					Percent of Overall Improper Payments
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other	
SNF Inpatient	$5,635,122,763	17.9%	15.4% - 20.5%	3.8%	75.5%	0.0%	0.3%	20.4%	17.2%
Hospital Outpatient	$2,504,003,924	3.3%	2.2% - 4.3%	3.5%	90.3%	4.1%	1.7%	0.4%	7.6%
Hospital Inpatient (Part A)	$2,244,462,381	20.4%	16.8% - 24.0%	0.9%	8.8%	90.3%	0.0%	0.0%	6.9%
Nonhospital based hospice	$1,645,252,778	6.8%	4.5% - 9.2%	15.9%	63.0%	17.4%	1.1%	2.6%	5.0%
Home Health	$1,076,295,257	6.7%	5.2% - 8.2%	2.3%	51.4%	33.7%	3.4%	9.2%	3.3%
CAH	$409,970,624	5.7%	3.3% - 8.2%	1.8%	94.4%	1.7%	2.0%	0.0%	1.3%
SNF Inpatient Part B	$224,489,932	8.7%	(0.8%) - 18.2%	0.4%	97.8%	0.0%	0.7%	1.1%	0.7%
Hospital based hospice	$190,631,223	10.8%	5.8% - 15.8%	3.0%	82.8%	7.2%	5.6%	1.4%	0.6%
Hospital Other Part B	$55,661,014	10.3%	4.1% - 16.5%	6.9%	90.3%	2.7%	0.2%	0.0%	0.2%
All Codes With Less Than 30 Claims	$54,783,402	1.5%	(1.6%) - 4.7%	0.0%	100.0%	0.0%	0.0%	0.0%	0.2%
Clinic ESRD	$41,451,667	0.5%	0.1% - 0.9%	0.0%	93.4%	0.0%	3.8%	2.9%	0.1%
FQHC	$34,348,774	3.0%	(1.3%) - 7.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
SNF Outpatient	$24,049,232	11.9%	1.0% - 22.9%	0.0%	98.5%	0.0%	0.0%	1.5%	0.1%
Hospital Inpatient Part B	$19,801,171	1.2%	0.0% - 2.3%	0.0%	73.6%	23.5%	0.0%	2.9%	0.1%
Clinical Rural Health	$19,567,867	1.4%	(0.2%) - 2.9%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Clinic CORF	$10,823,888	45.4%	27.3% - 63.5%	0.0%	84.3%	0.0%	1.2%	14.5%	0.0%
All Type of Services (Incl. Codes Not Listed)	**$14,190,715,897**	**7.6%**	**6.7% - 8.4%**	**4.4%**	**65.6%**	**19.8%**	**1.0%**	**9.2%**	**43.4%**

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)	$546,658,889	43.6%	39.2% - 47.9%	1.8%	4.5%	92.8%	0.9%	0.0%	1.7%
Percutaneous Intracardiac Procedures (273, 274)	$537,885,248	36.6%	32.2% - 41.1%	1.0%	96.6%	2.4%	0.1%	0.0%	1.6%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$316,101,282	11.6%	9.3% - 13.9%	0.0%	91.1%	7.5%	1.4%	0.0%	1.0%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$230,730,228	12.1%	6.6% - 17.5%	3.9%	17.6%	78.4%	0.1%	0.0%	0.7%
Psychoses (885)	$198,595,650	8.6%	4.0% - 13.2%	9.4%	68.5%	0.0%	9.7%	12.5%	0.6%
Spinal Fusion Except Cervical (459, 460)	$143,169,201	11.4%	4.7% - 18.2%	13.5%	23.2%	63.3%	0.0%	0.0%	0.4%
Respiratory Infections & Inflammations (177, 178, 179)	$107,559,699	2.9%	1.3% - 4.5%	19.9%	3.2%	54.7%	22.3%	0.0%	0.3%
Heart Failure & Shock (291, 292, 293)	$98,760,157	2.9%	(0.7%) - 6.6%	0.0%	0.0%	58.4%	41.6%	0.0%	0.3%
Degenerative Nervous System Disorders (056, 057)	$96,039,442	14.0%	9.2% - 18.9%	0.0%	27.8%	67.4%	3.7%	1.1%	0.3%
Cervical Spinal Fusion (471, 472, 473)	$95,620,911	18.1%	11.9% - 24.4%	0.0%	14.1%	84.9%	1.0%	0.0%	0.3%
Renal Failure (682, 683, 684)	$86,419,709	5.2%	0.5% - 9.8%	41.7%	0.0%	44.8%	13.5%	0.0%	0.3%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$65,533,731	0.7%	(0.1%) - 1.5%	1.7%	0.0%	7.5%	90.8%	0.0%	0.2%
Organic Disturbances & Intellectual Disability (884)	$64,658,595	16.3%	6.2% - 26.5%	0.0%	0.0%	93.1%	0.1%	6.8%	0.2%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$63,362,406	5.3%	1.3% - 9.3%	0.0%	33.3%	27.0%	39.7%	0.0%	0.2%
Medical Back Problems (551, 552)	$58,401,624	12.3%	4.9% - 19.6%	0.0%	0.0%	99.6%	0.4%	0.0%	0.2%
Syncope & Collapse (312)	$58,371,417	14.1%	5.5% - 22.7%	0.0%	9.2%	81.9%	9.0%	0.0%	0.2%
Kidney & Urinary Tract Infections (689, 690)	$56,504,733	5.5%	1.5% - 9.6%	0.0%	0.0%	52.3%	47.7%	0.0%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	$50,737,443	18.5%	13.1% - 23.9%	3.5%	72.1%	21.3%	3.2%	0.0%	0.2%
Lower Extrem & Humer Proc Except Hip, Foot, Femur (492, 493, 494)	$50,663,446	8.2%	2.3% - 14.1%	0.0%	0.0%	88.4%	11.6%	0.0%	0.2%
Transient Ischemia W/O Thrombolytic (069)	$49,926,503	28.0%	14.6% - 41.4%	8.2%	0.0%	89.7%	2.1%	0.0%	0.2%
All Type of Services (Incl. Codes Not Listed)	**$5,168,935,656**	**4.9%**	**4.5% - 5.3%**	**4.8%**	**24.7%**	**51.8%**	**17.7%**	**1.0%**	**15.8%**

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

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

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

Part B Services (BETOS Codes)	Improper Payment Rate	95% Confidence Interval	Percentage of Service Type Improper Payments by Type of Error					Percent of Overall Improper Payments
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other	
Other - non-Medicare fee schedule	55.8%	16.7% - 95.0%	0.0%	97.6%	0.0%	2.4%	0.0%	0.1%
Standard imaging - other	38.5%	17.3% - 59.7%	0.0%	97.5%	0.0%	0.0%	2.5%	0.3%
Ambulatory procedures - other	36.6%	23.1% - 50.1%	10.7%	87.4%	0.0%	1.3%	0.5%	0.9%
Chiropractic	33.6%	24.8% - 42.4%	2.4%	95.5%	0.6%	0.7%	0.9%	0.5%
Specialist - other	31.3%	25.9% - 36.8%	3.1%	91.3%	0.0%	3.4%	2.2%	2.7%
Lab tests - other (non-Medicare fee schedule)	27.2%	24.0% - 30.4%	5.1%	87.7%	4.7%	1.1%	1.4%	3.8%
Other - Medicare fee schedule	26.4%	11.7% - 41.1%	1.1%	98.9%	0.0%	0.0%	0.0%	0.2%
Other tests - other	24.0%	13.7% - 34.3%	0.6%	96.1%	0.0%	0.1%	3.2%	1.1%
Echography/ultrasonography - carotid arteries	21.7%	11.5% - 31.9%	22.5%	71.6%	0.0%	0.0%	6.0%	0.1%
Dialysis services (Medicare Fee Schedule)	21.6%	12.1% - 31.1%	13.4%	82.9%	0.0%	1.0%	2.7%	0.5%
Minor procedures - other (Medicare fee schedule)	18.5%	12.5% - 24.5%	5.1%	91.6%	0.2%	1.9%	1.2%	3.4%
Hospital visit - critical care	17.2%	12.5% - 21.9%	12.6%	20.5%	0.0%	66.1%	0.7%	0.7%
Oncology - radiation therapy	16.6%	6.0% - 27.2%	7.3%	92.7%	0.0%	0.0%	0.0%	0.5%
Hospital visit - initial	16.3%	14.0% - 18.7%	5.7%	34.8%	0.0%	56.7%	2.8%	1.2%
Lab tests - bacterial cultures	16.2%	(0.6%) - 32.9%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Specialist - psychiatry	16.1%	9.4% - 22.8%	17.0%	78.3%	0.1%	2.6%	2.0%	0.8%
Major procedure - Other	16.0%	2.9% - 29.1%	0.2%	87.4%	0.0%	12.4%	0.0%	1.2%
Standard imaging - chest	15.9%	9.6% - 22.2%	12.9%	87.1%	0.0%	0.0%	0.0%	0.1%
Eye procedure - cataract removal/lens insertion	14.4%	8.1% - 20.7%	8.5%	90.6%	0.0%	0.3%	0.6%	0.9%
Standard imaging - nuclear medicine	14.3%	(3.3%) - 31.8%	0.0%	10.5%	69.3%	16.5%	3.7%	0.4%
Overall (incl. Service Types Not Listed)	**10.3%**	**9.5% - 11.2%**	**10.2%**	**65.3%**	**2.8%**	**18.5%**	**3.2%**	**35.0%**

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	
Lenses	65.9%	51.4% - 80.4%	4.2%	32.7%	23.6%	0.0%	39.5%	0.0%
Pneumatic Compression Device	61.5%	49.0% - 74.0%	0.0%	62.9%	37.1%	0.0%	0.0%	0.1%
Surgical Dressings	57.6%	51.8% - 63.3%	48.6%	43.8%	0.4%	1.3%	5.8%	0.5%
LSO	54.4%	45.1% - 63.6%	20.1%	64.4%	0.3%	0.0%	15.1%	0.1%
Diabetic Shoes	47.1%	32.6% - 61.5%	0.0%	85.5%	0.0%	0.0%	14.5%	0.1%
Urological Supplies	45.2%	35.4% - 55.1%	80.2%	16.0%	0.4%	0.2%	3.2%	0.8%
Upper Limb Orthoses	40.3%	32.2% - 48.4%	35.6%	56.4%	1.4%	0.0%	6.6%	0.1%
Oral Anti-Cancer Drugs	37.7%	23.3% - 52.0%	0.0%	86.0%	0.0%	0.0%	14.0%	0.0%
Wheelchairs Options/Accessories	35.4%	3.6% - 67.1%	0.0%	3.9%	95.3%	0.0%	0.9%	0.3%
Lower Limb Orthoses	35.2%	27.3% - 43.2%	29.6%	39.5%	8.6%	0.0%	22.2%	0.3%
Suction Pump	33.5%	17.2% - 49.8%	1.6%	67.2%	2.6%	0.0%	28.6%	0.0%
Parenteral Nutrition	33.0%	26.6% - 39.5%	1.3%	69.4%	9.5%	0.1%	19.7%	0.3%
Commodes/Bed Pans/Urinals	32.6%	13.4% - 51.8%	0.0%	42.5%	0.0%	0.0%	57.5%	0.0%
Wheelchairs Manual	30.5%	23.2% - 37.8%	0.0%	79.7%	0.0%	0.0%	20.3%	0.1%
Hospital Beds/Accessories	27.3%	16.5% - 38.1%	0.0%	82.6%	0.0%	0.0%	17.4%	0.0%
Tracheostomy Supplies	25.6%	13.6% - 37.6%	0.0%	55.9%	2.8%	0.0%	41.2%	0.0%
Patient Lift	25.4%	5.1% - 45.8%	8.2%	91.8%	0.0%	0.0%	0.0%	0.0%
Glucose Monitor	25.2%	20.3% - 30.1%	67.6%	26.6%	0.0%	0.0%	5.8%	0.9%
Breast Prostheses	25.0%	12.3% - 37.6%	0.0%	50.0%	14.4%	0.0%	35.6%	0.0%
Enteral Nutrition	23.8%	16.9% - 30.7%	0.0%	48.8%	27.6%	0.0%	23.6%	0.1%
Overall (incl. Service Types Not Listed)	**21.4%**	**19.4% - 23.4%**	**29.2%**	**46.1%**	**10.1%**	**0.3%**	**14.3%**	**5.9%**

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	45.4%	27.3% - 63.5%	0.0%	84.3%	0.0%	1.2%	14.5%	0.0%
Hospital Inpatient (Part A)	20.4%	16.8% - 24.0%	0.9%	8.8%	90.3%	0.0%	0.0%	6.9%
SNF Inpatient	17.9%	15.4% - 20.5%	3.8%	75.5%	0.0%	0.3%	20.4%	17.2%
SNF Outpatient	11.9%	1.0% - 22.9%	0.0%	98.5%	0.0%	0.0%	1.5%	0.1%
Hospital based hospice	10.8%	5.8% - 15.8%	3.0%	82.8%	7.2%	5.6%	1.4%	0.6%
Hospital Other Part B	10.3%	4.1% - 16.5%	6.9%	90.3%	2.7%	0.2%	0.0%	0.2%
SNF Inpatient Part B	8.7%	(0.8%) - 18.2%	0.4%	97.8%	0.0%	0.7%	1.1%	0.7%
Nonhospital based hospice	6.8%	4.5% - 9.2%	15.9%	63.0%	17.4%	1.1%	2.6%	5.0%
Home Health	6.7%	5.2% - 8.2%	2.3%	51.4%	33.7%	3.4%	9.2%	3.3%
CAH	5.7%	3.3% - 8.2%	1.8%	94.4%	1.7%	2.0%	0.0%	1.3%
Hospital Outpatient	3.3%	2.2% - 4.3%	3.5%	90.3%	4.1%	1.7%	0.4%	7.6%
FQHC	3.0%	(1.3%) - 7.4%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
All Codes With Less Than 30 Claims	1.5%	(1.6%) - 4.7%	0.0%	100.0%	0.0%	0.0%	0.0%	0.2%
Clinical Rural Health	1.4%	(0.2%) - 2.9%	0.0%	100.0%	0.0%	0.0%	0.0%	0.1%
Hospital Inpatient Part B	1.2%	0.0% - 2.3%	0.0%	73.6%	23.5%	0.0%	2.9%	0.1%
Clinic ESRD	0.5%	0.1% - 0.9%	0.0%	93.4%	0.0%	3.8%	2.9%	0.1%
Overall (incl. Service Types Not Listed)	**7.6%**	**6.7% - 8.4%**	**4.4%**	**65.6%**	**19.8%**	**1.0%**	**9.2%**	**43.4%**

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)	43.6%	39.2% - 47.9%	1.8%	4.5%	92.8%	0.9%	0.0%	1.7%
Signs & Symptoms Of Musculoskeletal System & Conn Tissue (555, 556)	40.9%	16.6% - 65.2%	0.0%	0.0%	100.0%	0.0%	0.0%	0.1%
Percutaneous Intracardiac Procedures (273, 274)	36.6%	32.2% - 41.1%	1.0%	96.6%	2.4%	0.1%	0.0%	1.6%
Fractures Of Hip & Pelvis (535, 536)	32.4%	12.3% - 52.5%	0.0%	0.0%	72.7%	27.3%	0.0%	0.1%
Transient Ischemia W/O Thrombolytic (069)	28.0%	14.6% - 41.4%	8.2%	0.0%	89.7%	2.1%	0.0%	0.2%
Female Reproductive System Reconstructive Procedures (748)	27.5%	17.3% - 37.8%	5.0%	19.4%	75.6%	0.0%	0.0%	0.0%
Chest Pain (313)	19.2%	5.2% - 33.2%	0.0%	0.0%	100.0%	0.0%	0.0%	0.1%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	18.5%	13.1% - 23.9%	3.5%	72.1%	21.3%	3.2%	0.0%	0.2%
Cervical Spinal Fusion (471, 472, 473)	18.1%	11.9% - 24.4%	0.0%	14.1%	84.9%	1.0%	0.0%	0.3%
Cardiac Pacemaker Device Replacement (258, 259)	16.8%	9.4% - 24.3%	0.0%	2.7%	92.2%	5.1%	0.0%	0.0%
Organic Disturbances & Intellectual Disability (884)	16.3%	6.2% - 26.5%	0.0%	0.0%	93.1%	0.1%	6.8%	0.2%
Uterine & Adnexa Proc For Non-Malignancy (742, 743)	15.1%	6.1% - 24.2%	0.0%	12.4%	87.6%	0.0%	0.0%	0.0%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	15.1%	2.5% - 27.7%	0.0%	0.0%	93.4%	6.6%	0.0%	0.1%
Syncope & Collapse (312)	14.1%	5.5% - 22.7%	0.0%	9.2%	81.9%	9.0%	0.0%	0.2%
Degenerative Nervous System Disorders (056, 057)	14.0%	9.2% - 18.9%	0.0%	27.8%	67.4%	3.7%	1.1%	0.3%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	13.4%	8.2% - 18.6%	0.6%	16.3%	76.2%	6.9%	0.0%	0.1%
Aftercare (949, 950)	12.3%	2.4% - 22.2%	0.0%	45.0%	54.8%	0.2%	0.0%	0.0%
Hypertension (304, 305)	12.3%	1.4% - 23.1%	0.0%	0.0%	96.9%	3.1%	0.0%	0.1%
Medical Back Problems (551, 552)	12.3%	4.9% - 19.6%	0.0%	0.0%	99.6%	0.4%	0.0%	0.2%
Signs & Symptoms (947, 948)	12.1%	4.2% - 20.1%	0.0%	0.0%	76.4%	23.6%	0.0%	0.1%
Overall (incl. Service Types Not Listed)	**4.9%**	**4.5% - 5.3%**	**4.8%**	**24.7%**	**51.8%**	**17.7%**	**1.0%**	**15.8%**

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

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

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

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Nonhospital based hospice	$262,192,814	1.1%	0.0% - 2.2%	0.8%
SNF Inpatient	$214,000,591	0.7%	0.1% - 1.2%	0.7%
Urological Supplies	$206,845,310	36.3%	26.1% - 46.5%	0.6%
Office visits - established	$201,627,069	1.0%	0.2% - 1.9%	0.6%
Glucose Monitor	$188,267,870	17.1%	12.6% - 21.6%	0.6%
Hospital visit - subsequent	$93,223,743	1.7%	(0.7%) - 4.1%	0.3%
Hospital Outpatient	$86,402,931	0.1%	0.0% - 0.2%	0.3%
Surgical Dressings	$86,006,540	28.0%	21.5% - 34.4%	0.3%
Nursing home visit	$76,161,616	3.4%	1.3% - 5.5%	0.2%
Lab tests - other (non-Medicare fee schedule)	$64,547,610	1.4%	0.9% - 1.9%	0.2%
Minor procedures - other (Medicare fee schedule)	$56,513,560	0.9%	0.1% - 1.8%	0.2%
Minor procedures - musculoskeletal	$56,090,750	4.5%	(3.2%) - 12.1%	0.2%
Specialist - psychiatry	$43,243,884	2.7%	0.8% - 4.7%	0.1%
Renal Failure (682, 683, 684)	$36,030,033	2.2%	(2.0%) - 6.3%	0.1%
Ambulatory procedures - other	$31,219,926	3.9%	1.5% - 6.4%	0.1%
Emergency room visit	$28,679,631	1.4%	0.3% - 2.4%	0.1%
Specialist - other	$27,558,215	1.0%	0.3% - 1.6%	0.1%
Lower Limb Orthoses	$26,989,136	10.4%	5.3% - 15.5%	0.1%
Hospital visit - critical care	$26,937,521	2.2%	0.5% - 3.9%	0.1%
Eye procedure - cataract removal/lens insertion	$25,323,381	1.2%	(0.6%) - 3.0%	0.1%
Overall (Incl. Codes Not Listed)	**$2,605,575,430**	**0.6%**	**0.5% - 0.8%**	**8.0%**

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

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
SNF Inpatient	$4,252,725,023	13.5%	11.3% - 15.8%	13.0%
Hospital Outpatient	$2,261,240,833	2.9%	2.0% - 3.9%	6.9%
Lab tests - other (non-Medicare fee schedule)	$1,102,796,597	23.9%	21.2% - 26.6%	3.4%
Nonhospital based hospice	$1,036,947,944	4.3%	2.4% - 6.2%	3.2%
Minor procedures - other (Medicare fee schedule)	$1,012,618,948	17.0%	10.9% - 23.0%	3.1%
Specialist - other	$821,479,798	28.6%	23.2% - 34.1%	2.5%
Home Health	$553,287,049	3.4%	2.2% - 4.7%	1.7%
Percutaneous Intracardiac Procedures (273, 274)	$519,628,078	35.4%	31.0% - 39.8%	1.6%
CAH	$387,187,510	5.4%	3.0% - 7.8%	1.2%
Ambulance	$377,689,762	8.4%	3.9% - 12.9%	1.2%
Other tests - other	$340,763,148	23.0%	12.7% - 33.3%	1.0%
Major procedure - Other	$329,132,268	14.0%	1.0% - 26.9%	1.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	$287,842,812	10.6%	8.4% - 12.8%	0.9%
Eye procedure - cataract removal/lens insertion	$268,812,471	13.1%	7.0% - 19.1%	0.8%
Ambulatory procedures - other	$254,212,615	32.0%	19.7% - 44.3%	0.8%
Hospital visit - subsequent	$248,884,769	4.6%	2.4% - 6.7%	0.8%
SNF Inpatient Part B	$219,455,211	8.5%	(1.0%) - 18.0%	0.7%
Office visits - established	$210,901,501	1.1%	0.5% - 1.7%	0.6%
Specialist - psychiatry	$199,352,450	12.6%	6.2% - 19.0%	0.6%
Hospital Inpatient (Part A)	$197,433,997	1.8%	0.3% - 3.3%	0.6%
Overall (Incl. Codes Not Listed)	**$18,950,723,150**	**4.6%**	**4.2% - 4.9%**	**57.9%**

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

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Hospital Inpatient (Part A)	$2,025,963,866	18.4%	15.0% - 21.8%	6.2%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	$507,238,701	40.4%	36.1% - 44.8%	1.5%
Home Health	$362,526,291	2.3%	1.6% - 2.9%	1.1%
Nonhospital based hospice	$286,260,790	1.2%	0.2% - 2.2%	0.9%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	$180,780,112	9.4%	4.3% - 14.6%	0.6%
Ambulance	$163,754,083	3.6%	0.6% - 6.7%	0.5%
Hospital Outpatient	$102,910,952	0.1%	(0.1%) - 0.3%	0.3%
Wheelchairs Options/Accessories	$100,830,815	33.7%	1.8% - 65.6%	0.3%
Spinal Fusion Except Cervical (459, 460)	$90,689,594	7.2%	2.1% - 12.4%	0.3%
Standard imaging - nuclear medicine	$86,071,718	9.9%	(7.8%) - 27.6%	0.3%
Cervical Spinal Fusion (471, 472, 473)	$81,190,278	15.4%	9.6% - 21.2%	0.2%
Degenerative Nervous System Disorders (056, 057)	$64,746,375	9.5%	5.4% - 13.5%	0.2%
Organic Disturbances & Intellectual Disability (884)	$60,217,295	15.2%	5.3% - 25.1%	0.2%
Lab tests - other (non-Medicare fee schedule)	$58,898,977	1.3%	(1.0%) - 3.5%	0.2%
Respiratory Infections & Inflammations (177, 178, 179)	$58,809,226	1.6%	0.3% - 2.9%	0.2%
Medical Back Problems (551, 552)	$58,143,718	12.2%	4.8% - 19.6%	0.2%
Heart Failure & Shock (291, 292, 293)	$57,682,329	1.7%	(1.5%) - 4.9%	0.2%
Other Vascular Procedures (252, 253, 254)	$48,989,032	5.2%	0.5% - 9.8%	0.1%
Syncope & Collapse (312)	$47,790,535	11.6%	3.4% - 19.7%	0.1%
Lower Extrem & Humer Proc Except Hip, Foot, Femur (492, 493, 494)	$44,803,697	7.2%	1.4% - 13.1%	0.1%
Overall (Incl. Codes Not Listed)	**$6,000,986,087**	**1.5%**	**1.3% - 1.6%**	**18.3%**

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	$663,588,427	3.4%	2.8% - 3.9%	2.0%
Hospital visit - subsequent	$372,576,275	6.8%	5.7% - 7.9%	1.1%
Hospital visit - initial	$229,452,316	9.3%	8.0% - 10.5%	0.7%
Office visits - new	$173,831,800	4.7%	3.3% - 6.1%	0.5%
Emergency room visit	$152,876,584	7.4%	5.8% - 8.9%	0.5%
Hospital visit - critical care	$141,077,034	11.4%	6.9% - 15.8%	0.4%
Nursing home visit	$131,188,487	5.9%	4.3% - 7.5%	0.4%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$59,509,145	0.6%	(0.1%) - 1.4%	0.2%
Major procedure - Other	$46,591,145	2.0%	(1.7%) - 5.7%	0.1%
Hospital Outpatient	$43,535,357	0.1%	0.0% - 0.1%	0.1%
Heart Failure & Shock (291, 292, 293)	$41,077,828	1.2%	(0.6%) - 3.1%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	$39,298,103	2.5%	(0.0%) - 4.9%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$37,621,973	2.5%	0.1% - 4.9%	0.1%
Home Health	$36,995,044	0.2%	0.0% - 0.4%	0.1%
Ambulatory procedures - skin	$35,666,194	1.5%	(1.0%) - 4.0%	0.1%
Specialist - other	$31,004,944	1.1%	0.6% - 1.6%	0.1%
Kidney & Urinary Tract Infections (689, 690)	$26,968,660	2.6%	(0.1%) - 5.4%	0.1%
GI Hemorrhage (377, 378, 379)	$25,233,359	1.9%	0.3% - 3.4%	0.1%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$25,160,292	2.1%	(0.3%) - 4.5%	0.1%
Respiratory Infections & Inflammations (177, 178, 179)	$23,935,969	0.7%	0.1% - 1.2%	0.1%
Overall (Incl. Codes Not Listed)	**$3,176,080,733**	**0.8%**	**0.7% - 0.8%**	**9.7%**

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

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Office visits - established	$82,037,270	0.4%	0.2% - 0.7%	0.3%
Hospital visit - subsequent	$35,160,863	0.6%	0.2% - 1.1%	0.1%
Ambulatory procedures - skin	$32,307,999	1.4%	(0.9%) - 3.6%	0.1%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath (219, 220, 221)	$23,528,200	2.2%	(1.5%) - 5.9%	0.1%
Psychoses (885)	$19,282,583	0.8%	(0.7%) - 2.4%	0.1%
Nonhospital based hospice	$17,666,785	0.1%	(0.0%) - 0.2%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	$17,599,470	1.1%	(0.3%) - 2.5%	0.1%
Respiratory Infections & Inflammations (177, 178, 179)	$16,569,835	0.5%	(0.0%) - 0.9%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$16,328,720	1.1%	(0.4%) - 2.6%	0.0%
Office visits - new	$15,263,677	0.4%	(0.0%) - 0.9%	0.0%
GI Hemorrhage (377, 378, 379)	$13,582,898	1.0%	(0.2%) - 2.2%	0.0%
Home Health	$12,439,634	0.1%	(0.0%) - 0.2%	0.0%
Other drugs	$11,799,014	0.1%	(0.0%) - 0.3%	0.0%
Fractures Of Hip & Pelvis (535, 536)	$10,902,150	8.8%	(3.3%) - 21.0%	0.0%
Seizures (100, 101)	$10,366,246	2.1%	(1.0%) - 5.2%	0.0%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$9,310,976	0.8%	(0.5%) - 2.1%	0.0%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$9,035,003	0.1%	(0.0%) - 0.2%	0.0%
Renal Failure (682, 683, 684)	$8,939,596	0.5%	(0.2%) - 1.3%	0.0%
Major Small & Large Bowel Procedures (329, 330, 331)	$8,099,202	0.4%	(0.4%) - 1.2%	0.0%
Specialist - other	$7,977,696	0.3%	(0.0%) - 0.6%	0.0%
Overall (Incl. Codes Not Listed)	**$612,365,784**	**0.1%**	**0.1% - 0.2%**	**1.9%**

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

Table F6: Top 20 Types of Services with Other Errors

Medicare FFS Services	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
SNF Inpatient	$1,148,378,092	3.7%	2.4% - 4.9%	3.5%
Home Health	$99,014,054	0.6%	0.1% - 1.2%	0.3%
Undefined codes	$80,106,477	6.2%	0.9% - 11.6%	0.2%
Office visits - new	$54,511,654	1.5%	0.3% - 2.7%	0.2%
Ambulance	$47,763,211	1.1%	(1.0%) - 3.1%	0.1%
Nonhospital based hospice	$42,103,702	0.2%	(0.1%) - 0.4%	0.1%
Oxygen Supplies/Equipment	$30,005,402	4.2%	2.3% - 6.1%	0.1%
Hospital visit - subsequent	$29,967,008	0.5%	0.1% - 1.0%	0.1%
CPAP	$28,251,957	2.4%	1.1% - 3.8%	0.1%
Psychoses (885)	$24,754,229	1.1%	(1.0%) - 3.1%	0.1%
Lower Limb Orthoses	$20,276,092	7.8%	1.8% - 13.8%	0.1%
Specialist - other	$19,671,530	0.7%	0.3% - 1.1%	0.1%
Ventilators	$18,595,966	3.9%	2.2% - 5.6%	0.1%
Lab tests - other (non-Medicare fee schedule)	$17,512,097	0.4%	0.2% - 0.6%	0.1%
All Policy Groups with Less than 30 Claims	$17,140,017	4.6%	0.7% - 8.6%	0.1%
Glucose Monitor	$16,203,554	1.5%	0.2% - 2.7%	0.0%
Parenteral Nutrition	$16,132,477	6.5%	3.5% - 9.5%	0.0%
Infusion Pumps & Related Drugs	$15,479,279	2.4%	0.2% - 4.6%	0.0%
Immunosuppressive Drugs	$15,007,671	7.7%	0.7% - 14.7%	0.0%
Minor procedures - other (Medicare fee schedule)	$13,231,527	0.2%	(0.1%) - 0.5%	0.0%
Overall (Incl. Codes Not Listed)	**$1,999,999,503**	**0.5%**	**0.4% - 0.6%**	**6.1%**

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

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

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

Part B Services (BETOS Codes)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Lab tests - other (non-Medicare fee schedule)	4,101	$1,257,513,270	27.2%	24.0% - 30.4%	3.8%
Minor procedures - other (Medicare fee schedule)	1,327	$1,105,993,509	18.5%	12.5% - 24.5%	3.4%
Office visits - established	1,709	$1,077,121,456	5.5%	4.4% - 6.6%	3.3%
Specialist - other	1,049	$899,714,485	31.3%	25.9% - 36.8%	2.7%
Hospital visit - subsequent	872	$744,651,796	13.6%	10.4% - 16.8%	2.3%
Ambulance	423	$595,144,661	13.2%	7.6% - 18.8%	1.8%
All Codes With Less Than 30 Claims	1,566	$561,276,789	6.3%	1.9% - 10.6%	1.7%
Hospital visit - initial	701	$404,839,595	16.3%	14.0% - 18.7%	1.2%
Major procedure - Other	392	$376,640,674	16.0%	2.9% - 29.1%	1.2%
Other tests - other	645	$354,610,153	24.0%	13.7% - 34.3%	1.1%
Nursing home visit	502	$296,848,340	13.4%	10.2% - 16.6%	0.9%
Eye procedure - cataract removal/lens insertion	288	$296,715,219	14.4%	8.1% - 20.7%	0.9%
Ambulatory procedures - other	368	$290,839,660	36.6%	23.1% - 50.1%	0.9%
Office visits - new	364	$268,205,732	7.2%	5.1% - 9.4%	0.8%
Specialist - psychiatry	534	$254,537,463	16.1%	9.4% - 22.8%	0.8%
Emergency room visit	446	$227,013,887	11.0%	8.7% - 13.2%	0.7%
Hospital visit - critical care	320	$213,361,085	17.2%	12.5% - 21.9%	0.7%
Chiropractic	151	$178,324,416	33.6%	24.8% - 42.4%	0.5%
Other drugs	1,263	$173,559,512	1.6%	0.9% - 2.3%	0.5%
Dialysis services (Medicare Fee Schedule)	331	$159,952,861	21.6%	12.1% - 31.1%	0.5%
Ambulatory procedures - skin	333	$157,646,686	6.6%	3.1% - 10.1%	0.5%
Oncology - radiation therapy	123	$149,345,263	16.6%	6.0% - 27.2%	0.5%
Standard imaging - nuclear medicine	215	$124,263,667	14.3%	(3.3%) - 31.8%	0.4%
Minor procedures - skin	301	$123,463,177	12.9%	4.9% - 21.0%	0.4%
Minor procedures - musculoskeletal	314	$116,577,005	9.3%	1.5% - 17.1%	0.4%
Advanced imaging - CAT/CT/CTA: other	273	$98,353,964	8.3%	4.4% - 12.2%	0.3%
Standard imaging - other	128	$90,177,128	38.5%	17.3% - 59.7%	0.3%
Undefined codes	633	$87,401,979	6.8%	1.5% - 12.2%	0.3%
Advanced imaging - MRI/MRA: other	158	$65,521,161	6.6%	2.0% - 11.2%	0.2%
Eye procedure - other	258	$64,292,165	11.5%	(3.0%) - 26.0%	0.2%
Lab tests - other (Medicare fee schedule)	299	$61,771,274	4.2%	0.6% - 7.8%	0.2%
Other - Medicare fee schedule	275	$59,883,264	26.4%	11.7% - 41.1%	0.2%

Part B Services (BETOS Codes)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Echography/ultrasonography - heart	127	$55,388,118	7.6%	2.1% - 13.0%	0.2%
Specialist - ophthalmology	292	$51,307,267	3.0%	(0.1%) - 6.1%	0.2%
Standard imaging - musculoskeletal	194	$50,049,761	10.4%	4.1% - 16.7%	0.2%
Advanced imaging - CAT/CT/CTA: brain/head/neck	117	$44,900,035	10.6%	2.5% - 18.6%	0.1%
Echography/ultrasonography - carotid arteries	109	$42,371,640	21.7%	11.5% - 31.9%	0.1%
Echography/ultrasonography - other	66	$32,755,021	4.5%	(1.6%) - 10.6%	0.1%
Other tests - electrocardiograms	342	$30,969,382	13.2%	8.3% - 18.0%	0.1%
Standard imaging - chest	193	$30,274,869	15.9%	9.6% - 22.2%	0.1%
Lab tests - automated general profiles	424	$27,950,204	8.7%	5.5% - 12.0%	0.1%
Other - non-Medicare fee schedule	58	$27,559,002	55.8%	16.7% - 95.0%	0.1%
Lab tests - blood counts	459	$26,442,722	12.1%	8.3% - 15.9%	0.1%
Endoscopy - colonoscopy	118	$25,086,748	2.8%	0.6% - 5.1%	0.1%
Lab tests - routine venipuncture (non-Medicare fee schedule	531	$21,509,958	10.1%	6.1% - 14.1%	0.1%
Major procedure, orthopedic - Knee replacement	99	$16,279,701	2.0%	(0.7%) - 4.7%	0.0%
Anesthesia	92	$12,678,857	0.9%	(0.3%) - 2.1%	0.0%
Lab tests - bacterial cultures	60	$8,952,206	16.2%	(0.6%) - 32.9%	0.0%
Standard imaging - breast	118	$6,521,598	0.9%	(0.4%) - 2.3%	0.0%
Lab tests - urinalysis	207	$5,628,470	11.5%	5.6% - 17.5%	0.0%
Immunizations/Vaccinations	327	$44,614	0.0%	(0.0%) - 0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	**17,000**	**$11,452,231,470**	**10.3%**	**9.5% - 11.2%**	**35.0%**

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
Glucose Monitor	958	$278,458,137	25.2%	20.3% - 30.1%	0.9%
Urological Supplies	488	$257,761,158	45.2%	35.4% - 55.1%	0.8%
Surgical Dressings	702	$176,907,941	57.6%	51.8% - 63.3%	0.5%
CPAP	1,160	$146,106,081	12.5%	9.5% - 15.5%	0.4%
Wheelchairs Options/Accessories	258	$105,842,955	35.4%	3.6% - 67.1%	0.3%
Lower Limb Orthoses	598	$91,221,893	35.2%	27.3% - 43.2%	0.3%
Infusion Pumps & Related Drugs	617	$89,453,268	14.1%	8.8% - 19.4%	0.3%
Parenteral Nutrition	375	$81,850,376	33.0%	26.6% - 39.5%	0.3%
Oxygen Supplies/Equipment	618	$81,010,316	11.3%	8.4% - 14.3%	0.2%
All Policy Groups with Less than 30 Claims	423	$65,631,873	17.7%	7.8% - 27.6%	0.2%
Ventilators	546	$63,509,812	13.3%	10.2% - 16.4%	0.2%
LSO	333	$47,835,412	54.4%	45.1% - 63.6%	0.1%
Immunosuppressive Drugs	458	$45,367,022	23.2%	15.0% - 31.5%	0.1%
Upper Limb Orthoses	291	$43,651,656	40.3%	32.2% - 48.4%	0.1%
Nebulizers & Related Drugs	911	$42,203,134	7.1%	3.8% - 10.3%	0.1%
Pneumatic Compression Device	123	$37,724,521	61.5%	49.0% - 74.0%	0.1%
Diabetic Shoes	157	$35,744,692	47.1%	32.6% - 61.5%	0.1%
Ostomy Supplies	293	$34,189,034	16.2%	10.5% - 22.0%	0.1%
Enteral Nutrition	324	$31,147,126	23.8%	16.9% - 30.7%	0.1%
Wheelchairs Manual	296	$28,149,410	30.5%	23.2% - 37.8%	0.1%
Lower Limb Prostheses	336	$20,389,632	5.7%	2.3% - 9.1%	0.1%
Wheelchairs Motorized	45	$19,750,519	15.1%	(10.0%) - 40.1%	0.1%
Hospital Beds/Accessories	146	$15,966,827	27.3%	16.5% - 38.1%	0.0%
Lenses	59	$15,658,143	65.9%	51.4% - 80.4%	0.0%
Negative Pressure Wound Therapy	110	$12,107,646	17.0%	7.3% - 26.6%	0.0%
Wheelchairs Seating	126	$10,473,437	17.6%	2.6% - 32.7%	0.0%
Intravenous Immune Globulin	217	$7,583,027	4.6%	0.3% - 9.0%	0.0%
Breast Prostheses	76	$6,697,643	25.0%	12.3% - 37.6%	0.0%
Tracheostomy Supplies	73	$6,526,545	25.6%	13.6% - 37.6%	0.0%
Suction Pump	146	$4,728,141	33.5%	17.2% - 49.8%	0.0%
Walkers	98	$3,885,911	14.3%	4.3% - 24.3%	0.0%
Oral Anti-Cancer Drugs	64	$3,221,241	37.7%	23.3% - 52.0%	0.0%
Patient Lift	57	$2,982,305	25.4%	5.1% - 45.8%	0.0%
Speech Generating Devices	64	$2,556,878	18.1%	5.3% - 30.9%	0.0%
Commodes/Bed Pans/Urinals	57	$2,525,658	32.6%	13.4% - 51.8%	0.0%
Support Surfaces	45	$1,666,202	6.9%	(1.2%) - 15.0%	0.0%
Other Neuromuscular Stimulators	36	$996,308	11.2%	0.6% - 21.8%	0.0%
Automatic External Defibrillator	53	$0	0.0%	N/A	0.0%
Orthopedic Footwear	40	$0	0.0%	N/A	0.0%

DMEPOS (Policy Group)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Respiratory Assist Device	101	$0	0.0%	N/A	0.0%
Misc Drugs	33	$0	0.0%	N/A	0.0%
Routinely Denied Items	174	$0	0.0%	N/A	0.0%
All Type of Services (Incl. Codes Not Listed)	**11,000**	**$1,921,481,880**	**21.4%**	**19.4% - 23.4%**	**5.9%**

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	1,577	$5,635,122,763	17.9%	15.4% - 20.5%	17.2%
Hospital Outpatient	2,247	$2,504,003,924	3.3%	2.2% - 4.3%	7.6%
Hospital Inpatient (Part A)	1,016	$2,244,462,381	20.4%	16.8% - 24.0%	6.9%
Nonhospital based hospice	745	$1,645,252,778	6.8%	4.5% - 9.2%	5.0%
Home Health	1,250	$1,076,295,257	6.7%	5.2% - 8.2%	3.3%
CAH	283	$409,970,624	5.7%	3.3% - 8.2%	1.3%
SNF Inpatient Part B	93	$224,489,932	8.7%	(0.8%) - 18.2%	0.7%
Hospital based hospice	152	$190,631,223	10.8%	5.8% - 15.8%	0.6%
Hospital Other Part B	102	$55,661,014	10.3%	4.1% - 16.5%	0.2%
All Codes With Less Than 30 Claims	32	$54,783,402	1.5%	(1.6%) - 4.7%	0.2%
Clinic ESRD	636	$41,451,667	0.5%	0.1% - 0.9%	0.1%
FQHC	76	$34,348,774	3.0%	(1.3%) - 7.4%	0.1%
SNF Outpatient	52	$24,049,232	11.9%	1.0% - 22.9%	0.1%
Hospital Inpatient Part B	49	$19,801,171	1.2%	0.0% - 2.3%	0.1%
Clinical Rural Health	124	$19,567,867	1.4%	(0.2%) - 2.9%	0.1%
Clinic CORF	72	$10,823,888	45.4%	27.3% - 63.5%	0.0%
All Type of Services (Incl. Codes Not Listed)	**8,506**	**$14,190,715,897**	**7.6%**	**6.7% - 8.4%**	**43.4%**

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	1,832	$749,012,803	4.4%	3.3% - 5.5%	2.3%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	671	$546,658,889	43.6%	39.2% - 47.9%	1.7%
Percutaneous Intracardiac Procedures (273, 274)	506	$537,885,248	36.6%	32.2% - 41.1%	1.6%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	741	$316,101,282	11.6%	9.3% - 13.9%	1.0%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	223	$230,730,228	12.1%	6.6% - 17.5%	0.7%
Psychoses (885)	344	$198,595,650	8.6%	4.0% - 13.2%	0.6%
Spinal Fusion Except Cervical (459, 460)	83	$143,169,201	11.4%	4.7% - 18.2%	0.4%
Respiratory Infections & Inflammations (177, 178, 179)	426	$107,559,699	2.9%	1.3% - 4.5%	0.3%
Heart Failure & Shock (291, 292, 293)	75	$98,760,157	2.9%	(0.7%) - 6.6%	0.3%
Degenerative Nervous System Disorders (056, 057)	230	$96,039,442	14.0%	9.2% - 18.9%	0.3%
Cervical Spinal Fusion (471, 472, 473)	196	$95,620,911	18.1%	11.9% - 24.4%	0.3%
Renal Failure (682, 683, 684)	184	$86,419,709	5.2%	0.5% - 9.8%	0.3%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	266	$65,533,731	0.7%	(0.1%) - 1.5%	0.2%
Organic Disturbances & Intellectual Disability (884)	60	$64,658,595	16.3%	6.2% - 26.5%	0.2%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	61	$63,362,406	5.3%	1.3% - 9.3%	0.2%
Medical Back Problems (551, 552)	88	$58,401,624	12.3%	4.9% - 19.6%	0.2%
Syncope & Collapse (312)	66	$58,371,417	14.1%	5.5% - 22.7%	0.2%
Kidney & Urinary Tract Infections (689, 690)	166	$56,504,733	5.5%	1.5% - 9.6%	0.2%
Cardiac Defibrillator Implant W/O Cardiac Cath (226, 227)	193	$50,737,443	18.5%	13.1% - 23.9%	0.2%
Lower Extrem & Humer Proc Except Hip, Foot, Femur (492, 493, 494)	136	$50,663,446	8.2%	2.3% - 14.1%	0.2%
Transient Ischemia W/O Thrombolytic (069)	57	$49,926,503	28.0%	14.6% - 41.4%	0.2%
Revision Of Hip Or Knee Replacement (466, 467, 468)	42	$49,156,191	7.1%	0.9% - 13.2%	0.2%
Other Vascular Procedures (252, 253, 254)	90	$48,989,032	5.2%	0.5% - 9.8%	0.1%
Simple Pneumonia & Pleurisy (193, 194, 195)	135	$47,779,281	3.0%	0.4% - 5.6%	0.1%
Seizures (100, 101)	74	$45,786,328	9.2%	2.7% - 15.8%	0.1%
Perc Cardiovasc Proc W Drug-Eluting Stent (247)	97	$44,426,293	5.1%	0.4% - 9.9%	0.1%
AMI, Discharged Alive (280, 281, 282)	219	$43,554,072	3.2%	0.9% - 5.5%	0.1%
Signs & Symptoms Of Musculoskeletal System & Conn Tissue (555, 556)	59	$41,606,405	40.9%	16.6% - 65.2%	0.1%
GI Hemorrhage (377, 378, 379)	167	$40,357,820	3.0%	1.1% - 4.9%	0.1%
Fractures Of Hip & Pelvis (535, 536)	30	$39,998,836	32.4%	12.3% - 52.5%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	107	$37,621,973	2.5%	0.1% - 4.9%	0.1%
Esophagitis, Gastroent & Misc Digest Disorders (391, 392)	109	$37,560,042	3.7%	0.1% - 7.3%	0.1%
Other Musculoskelet Sys & Conn Tiss OR Proc (515, 516, 517)	116	$35,659,536	10.0%	2.3% - 17.7%	0.1%
Other Disorders Of Nervous System (091, 092, 093)	64	$34,543,680	8.1%	2.1% - 14.1%	0.1%
Back & Neck Proc Exc Spinal Fusion (518, 519, 520)	108	$34,231,135	15.1%	2.5% - 27.7%	0.1%

Part A Hospital IPPS Services (MS-DRGs)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Misc Disorders Of Nutrition, Metabolism, Fluids/Electrolytes (640, 641)	159	$33,118,140	2.5%	0.0% - 5.1%	0.1%
Major Joint/Limb Reattachment Procedure Of Upper Extremities (483)	50	$32,968,581	10.4%	1.3% - 19.5%	0.1%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath (219, 220, 221)	106	$32,644,499	3.0%	(0.9%) - 6.9%	0.1%
Cardiac Arrhythmia & Conduction Disorders (308, 309, 310)	212	$31,910,680	3.9%	1.3% - 6.5%	0.1%
GI Obstruction (388, 389, 390)	89	$31,610,903	7.5%	(1.1%) - 16.1%	0.1%
Non-Extensive OR Proc Unrelated To Principal Diagnosis (987, 988, 989)	68	$31,213,238	10.0%	1.5% - 18.5%	0.1%
Major Chest Procedures (163, 164, 165)	83	$27,420,689	3.1%	(0.7%) - 6.9%	0.1%
Other Circulatory System Diagnoses (314, 315, 316)	75	$27,076,364	3.7%	0.3% - 7.2%	0.1%
Chest Pain (313)	41	$24,891,679	19.2%	5.2% - 33.2%	0.1%
Kidney & Ureter Procedures For Non-Neoplasm (659, 660, 661)	69	$24,621,598	4.8%	0.3% - 9.3%	0.1%
Major Small & Large Bowel Procedures (329, 330, 331)	118	$24,607,246	1.2%	(0.1%) - 2.6%	0.1%
Coronary Bypass W/O Cardiac Cath (235, 236)	53	$24,207,023	3.3%	(1.0%) - 7.6%	0.1%
Other Kidney & Urinary Tract Diagnoses (698, 699, 700)	164	$23,983,508	2.1%	0.4% - 3.8%	0.1%
Cirrhosis & Alcoholic Hepatitis (432, 433, 434)	62	$22,869,076	7.0%	(3.5%) - 17.4%	0.1%
Chronic Obstructive Pulmonary Disease (190, 191, 192)	126	$21,672,938	3.1%	0.6% - 5.7%	0.1%
Hypertension (304, 305)	48	$21,308,390	12.3%	1.4% - 23.1%	0.1%
Signs & Symptoms (947, 948)	59	$21,066,299	12.1%	4.2% - 20.1%	0.1%
Extracranial Procedures (037, 038, 039)	32	$20,623,659	8.4%	(1.5%) - 18.4%	0.1%
Permanent Cardiac Pacemaker Implant (242, 243, 244)	107	$20,180,551	2.4%	0.0% - 4.8%	0.1%
Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463, 464, 465)	65	$18,832,099	4.1%	(0.4%) - 8.5%	0.1%
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	355	$18,187,101	13.4%	8.2% - 18.6%	0.1%
Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (004)	89	$16,931,392	1.5%	(1.0%) - 4.1%	0.1%
Diabetes (637, 638, 639)	117	$16,276,817	2.6%	0.4% - 4.8%	0.0%
Alcohol/Drug Abuse Or Dependence W/O Rehabilitation Therapy (896, 897)	53	$15,918,109	6.1%	0.2% - 12.0%	0.0%
Circulatory Disorders Except AMI, W Card Cath (286, 287)	89	$15,658,774	1.6%	(0.2%) - 3.3%	0.0%
Complications Of Treatment (919, 920, 921)	61	$14,937,947	5.4%	0.1% - 10.7%	0.0%
Peripheral Vascular Disorders (299, 300, 301)	67	$14,103,031	5.2%	0.0% - 10.4%	0.0%
Nonspecific Cerebrovascular Disorders (070, 071, 072)	78	$13,616,877	4.2%	0.3% - 8.1%	0.0%
Other OR Procedures For Injuries (907, 908, 909)	74	$13,292,738	3.0%	0.2% - 5.9%	0.0%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	86	$13,278,717	0.3%	(0.0%) - 0.7%	0.0%
Other Major Cardiovascular Procedures (270, 271, 272)	52	$13,133,453	1.2%	(1.1%) - 3.6%	0.0%
Disorders Of The Biliary Tract (444, 445, 446)	46	$12,849,276	4.2%	(1.6%) - 9.9%	0.0%
Pathological Fractures & Musculoskelet & Conn Tiss Malig (542, 543, 544)	30	$11,876,311	6.3%	(1.6%) - 14.1%	0.0%
Laparoscopic Cholecystectomy W/O C.D.E. (417, 418, 419)	55	$10,936,813	2.3%	(0.3%) - 4.9%	0.0%
Respiratory Neoplasms (180, 181, 182)	48	$10,854,818	5.7%	(2.0%) - 13.4%	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
Cranial & Peripheral Nerve Disorders (073, 074)	48	$10,238,619	7.9%	0.3% - 15.5%	0.0%
Major Gastrointestinal Disorders & Peritoneal Infections (371, 372, 373)	41	$10,164,045	4.0%	(0.2%) - 8.1%	0.0%
Craniotomy & Endovascular Intracranial Procedures (025, 026, 027)	170	$9,120,569	0.7%	(0.3%) - 1.8%	0.0%
Bronchitis & Asthma (202, 203)	34	$8,263,071	5.0%	(1.3%) - 11.2%	0.0%
Hip & Femur Procedures Except Major Joint (480, 481, 482)	110	$8,237,216	0.4%	(0.1%) - 1.0%	0.0%
Red Blood Cell Disorders (811, 812)	90	$7,948,623	1.4%	(1.1%) - 4.0%	0.0%
Hip Replacement With Principal Diagnosis Of Hip Fracture (521, 522)	100	$7,672,605	0.9%	(0.5%) - 2.2%	0.0%
Other Digestive System Diagnoses (393, 394, 395)	103	$7,533,975	1.2%	(0.3%) - 2.7%	0.0%
Disorders Of Liver Except Malig, Cirr, Alc Hepa (441, 442, 443)	62	$6,970,593	2.3%	(1.2%) - 5.9%	0.0%
Cellulitis (602, 603)	86	$6,385,983	1.0%	(0.1%) - 2.0%	0.0%
Coagulation Disorders (813)	47	$5,336,877	2.9%	(0.5%) - 6.4%	0.0%
Aftercare (949, 950)	46	$5,310,972	12.3%	2.4% - 22.2%	0.0%
Stomach, Esophageal & Duodenal Proc (326, 327, 328)	74	$4,841,452	0.7%	(0.5%) - 1.9%	0.0%
Traumatic Stupor & Coma, Coma <1 Hr (085, 086, 087)	37	$4,628,149	1.8%	(1.8%) - 5.4%	0.0%
Uterine & Adnexa Proc For Non-Malignancy (742, 743)	80	$3,596,748	15.1%	6.1% - 24.2%	0.0%
Coronary Bypass W Cardiac Cath (233, 234)	102	$3,377,979	0.4%	(0.2%) - 1.0%	0.0%
Other Digestive System OR Procedures (356, 357, 358)	50	$3,221,960	1.1%	(0.7%) - 2.9%	0.0%
AICD Generator Procedures (245)	101	$2,706,148	7.8%	2.9% - 12.7%	0.0%
Female Reproductive System Reconstructive Procedures (748)	96	$2,691,975	27.5%	17.3% - 37.8%	0.0%
Chimeric Antigen Receptor (Car) T-Cell Immunotherapy (018)	55	$2,675,999	0.6%	(0.5%) - 1.6%	0.0%
Disorders Of Pancreas Except Malignancy (438, 439, 440)	35	$2,398,828	1.4%	(1.3%) - 4.0%	0.0%
Chemotherapy W/O Acute Leukemia As Secondary Diagnosis (846, 847, 848)	84	$2,295,912	1.1%	(0.7%) - 3.0%	0.0%
Postoperative Or Post-Traumatic Infections W OR Proc (856, 857, 858)	62	$2,138,495	0.5%	(0.5%) - 1.6%	0.0%
Cardiac Pacemaker Device Replacement (258, 259)	109	$1,966,285	16.8%	9.4% - 24.3%	0.0%
Lymphoma & Non-Acute Leukemia (840, 841, 842)	59	$1,668,226	0.5%	(0.5%) - 1.4%	0.0%
Respiratory System Diagnosis W Ventilator Support >96 Hours (207)	43	$668,722	0.1%	(0.0%) - 0.2%	0.0%
Traumatic Stupor & Coma, Coma >1 Hr (082, 083, 084)	32	$657,905	0.3%	(0.2%) - 0.7%	0.0%
Pulmonary Embolism (175, 176)	43	$632,494	0.3%	(0.3%) - 0.9%	0.0%
Poisoning & Toxic Effects Of Drugs (917, 918)	30	$508,109	0.3%	(0.3%) - 0.9%	0.0%
Acute Leukemia W/O Major OR Procedure (834, 835, 836)	40	$182,919	0.1%	(0.1%) - 0.3%	0.0%
Endocrine Disorders (643, 644, 645)	47	$145,491	0.0%	(0.0%) - 0.1%	0.0%
Respiratory System Diagnosis W Ventilator Support <=96 Hours (208)	30	$85,636	0.0%	(0.0%) - 0.1%	0.0%
ECMO Or Trach W MV >96 Hrs Or PDX Exc Face, Mouth & Neck (003)	43	$0	0.0%	N/A	0.0%
Heart Transplant Or Implant Of Heart Assist System (001, 002)	40	$0	0.0%	N/A	0.0%
Percutaneous Cardiovascular Procedures W Drug-Eluting Stent (246)	43	$0	0.0%	N/A	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
Pulmonary Edema & Respiratory Failure (189)	44	$0	0.0%	N/A	0.0%
Septicemia Or Severe Sepsis W MV >96 Hours (870)	77	$0	0.0%	N/A	0.0%
All Type of Services (Incl. Codes Not Listed)	**13,500**	**$5,168,935,656**	**4.9%**	**4.5% - 5.3%**	**15.8%**

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

This series of tables is sorted in descending order by projected improper payments. All estimates in these tables are based on a minimum of 30 lines in the sample. Appendix H shows the referring providers or provider types for the top three service types for Part B and DMEPOS.

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

Lab tests - other (non-Medicare fee schedule)	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	1,464	$497,979,707	25.5%	20.5% - 30.4%	39.6%
Family Practice	429	$192,642,556	29.7%	22.1% - 37.2%	15.3%
Nurse Practitioner	557	$166,119,405	28.6%	22.9% - 34.2%	13.2%
Gastroenterology	33	$58,118,700	33.0%	(12.5%) - 78.5%	4.6%
No Referring Provider Type	178	$42,583,116	26.1%	13.8% - 38.3%	3.4%
Physician Assistant	166	$36,225,556	21.1%	12.5% - 29.7%	2.9%
General Surgery	185	$30,147,830	22.4%	11.4% - 33.5%	2.4%
Physical Medicine and Rehabilitation	39	$28,272,960	71.5%	58.0% - 85.0%	2.2%
Obstetrics/Gynecology	108	$25,637,019	28.1%	11.5% - 44.7%	2.0%
Urology	266	$22,344,532	14.6%	8.4% - 20.7%	1.8%
Emergency Medicine	38	$18,869,701	39.2%	16.6% - 61.9%	1.5%
Anesthesiology	83	$16,889,367	25.7%	12.3% - 39.1%	1.3%
Pathology	114	$14,028,356	25.2%	12.2% - 38.1%	1.1%
Cardiology	50	$11,530,590	22.1%	8.4% - 35.8%	0.9%
Interventional Pain Management	45	$9,834,786	30.0%	12.2% - 47.8%	0.8%
Dermatology	69	$6,971,583	16.7%	4.5% - 29.0%	0.6%
Psychiatry	31	$5,810,551	26.3%	6.5% - 46.1%	0.5%
Radiation Oncology	38	$5,312,717	34.7%	17.5% - 51.9%	0.4%
All Referring Providers	**4,101**	**$1,257,513,270**	**27.2%**	**24.0% - 30.4%**	**100.0%**

Table H2: 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	202	$337,917,706	23.0%	14.9% - 31.0%	30.6%
Internal Medicine	415	$306,352,951	21.8%	1.8% - 41.9%	27.7%
Family Practice	196	$190,288,599	24.8%	13.8% - 35.8%	17.2%
No Referring Provider Type	121	$77,638,372	13.8%	(7.2%) - 34.7%	7.0%
Nurse Practitioner	99	$42,438,952	8.2%	0.0% - 16.3%	3.8%
Physician Assistant	54	$32,896,345	10.1%	(0.7%) - 20.9%	3.0%
Neurology	73	$7,844,512	5.1%	(2.0%) - 12.3%	0.7%
All Referring Providers	**1,327**	**$1,105,993,509**	**18.5%**	**12.5% - 24.5%**	**100.0%**

Table H3: Improper Payment Rates for Office visits - established by Provider Type

Office visits - established	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	244	$220,374,521	8.4%	3.0% - 13.8%	20.5%
Nurse Practitioner	232	$156,875,115	7.1%	3.2% - 11.0%	14.6%
Family Practice	215	$125,179,907	4.8%	2.5% - 7.0%	11.6%
Ophthalmology	54	$67,349,370	9.3%	0.2% - 18.3%	6.3%
All Provider Types With Less Than 30 Claims	78	$42,141,867	5.4%	2.4% - 8.5%	3.9%
Hematology/Oncology	68	$41,809,890	6.2%	2.5% - 9.8%	3.9%
Physician Assistant	105	$40,054,487	3.6%	1.1% - 6.2%	3.7%
Urology	41	$39,194,834	6.3%	(1.1%) - 13.6%	3.6%
Psychiatry	53	$38,166,803	10.9%	0.9% - 20.9%	3.5%
Podiatry	50	$35,001,730	5.2%	0.1% - 10.2%	3.2%
Neurology	54	$33,550,922	4.8%	0.2% - 9.5%	3.1%
Cardiology	96	$30,275,020	2.5%	0.7% - 4.4%	2.8%
Orthopedic Surgery	49	$27,934,825	3.7%	0.4% - 6.9%	2.6%
Dermatology	68	$13,484,946	1.8%	(0.0%) - 3.7%	1.3%
All Provider Types	**1,709**	**$1,077,121,456**	**5.5%**	**4.4% - 6.6%**	**100.0%**

Table H4: Improper Payment Rates for Glucose Monitor by Referring Provider

Glucose Monitor	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Internal Medicine	457	$123,039,067	21.9%	16.0% - 27.8%	44.2%
Family Practice	242	$97,535,010	45.6%	32.5% - 58.7%	35.0%
Nurse Practitioner	157	$15,284,739	7.0%	0.4% - 13.6%	5.5%
Physician Assistant	53	$2,140,549	4.5%	(1.6%) - 10.6%	0.8%
All Referring Providers	**958**	**$278,458,137**	**25.2%**	**20.3% - 30.1%**	**100.0%**

Table H5: Improper Payment Rates for Urological Supplies by Referring Provider

Urological Supplies	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Type of Service Improper Payments
Family Practice	74	$135,453,865	87.2%	75.5% - 98.9%	52.6%
Urology	222	$31,466,973	14.1%	0.6% - 27.5%	12.2%
Internal Medicine	54	$13,858,926	47.9%	16.0% - 79.8%	5.4%
Physician Assistant	36	$2,568,124	11.0%	(3.3%) - 25.3%	1.0%
Nurse Practitioner	53	$2,314,656	5.0%	(0.2%) - 10.3%	0.9%
All Referring Providers	**488**	**$257,761,158**	**45.2%**	**35.4% - 55.1%**	**100.0%**

Table H6: 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
General Surgery	115	$40,378,027	66.2%	53.5% - 78.9%	22.8%
Family Practice	158	$40,050,743	58.5%	47.8% - 69.2%	22.6%
Internal Medicine	163	$37,439,760	50.7%	39.2% - 62.2%	21.2%
Nurse Practitioner	108	$22,505,095	52.7%	34.8% - 70.6%	12.7%
Podiatry	51	$7,563,954	54.6%	34.5% - 74.7%	4.3%
All Referring Providers	**702**	**$176,907,941**	**57.6%**	**51.8% - 63.3%**	**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)	3,766	$1,348,919,758	25.5%	22.2% - 28.8%	4.1%
Internal Medicine	1,237	$1,155,045,801	14.2%	11.8% - 16.6%	3.5%
Nurse Practitioner	999	$747,670,322	11.9%	6.9% - 17.0%	2.3%
Physical Therapist in Private Practice	568	$659,222,324	15.8%	11.9% - 19.7%	2.0%
Ambulatory Surgical Center	275	$656,289,639	14.7%	6.1% - 23.3%	2.0%
Family Practice	738	$623,251,727	11.4%	8.9% - 13.9%	1.9%
Ambulance Service Supplier (e.g., private ambulance companies)	423	$595,144,661	13.2%	7.6% - 18.8%	1.8%
All Provider Types With Less Than 30 Claims	587	$501,693,123	8.9%	4.5% - 13.2%	1.5%
Nephrology	377	$440,742,440	18.6%	0.8% - 36.4%	1.3%
Cardiology	571	$266,717,348	7.8%	5.6% - 9.9%	0.8%
Diagnostic Radiology	750	$264,272,682	7.2%	5.0% - 9.4%	0.8%
Emergency Medicine	527	$261,580,943	10.4%	8.2% - 12.5%	0.8%
Hematology/Oncology	473	$251,423,012	6.0%	1.6% - 10.5%	0.8%
Ophthalmology	596	$249,962,591	3.2%	1.4% - 5.1%	0.8%
Podiatry	245	$216,903,925	11.2%	6.7% - 15.7%	0.7%
Pulmonary Disease	133	$200,571,666	19.7%	9.4% - 30.0%	0.6%
Physical Medicine and Rehabilitation	165	$187,017,490	13.9%	4.7% - 23.2%	0.6%
Physician Assistant	407	$184,980,031	6.4%	4.1% - 8.7%	0.6%
Clinical Psychologist	93	$184,487,728	20.8%	1.9% - 39.7%	0.6%
Radiation Oncology	138	$180,889,796	16.9%	7.4% - 26.3%	0.6%
Chiropractic	156	$178,324,416	33.6%	24.8% - 42.4%	0.5%
Dermatology	234	$170,121,431	5.1%	1.9% - 8.4%	0.5%
Hospitalist	240	$135,765,842	10.4%	6.9% - 14.0%	0.4%
Cardiac Electrophysiology	62	$133,532,776	19.3%	4.7% - 33.9%	0.4%
IDTF	366	$124,367,625	13.9%	5.6% - 22.2%	0.4%
Neurology	178	$120,238,913	7.3%	3.7% - 10.9%	0.4%
Psychiatry	120	$113,203,760	14.2%	5.7% - 22.6%	0.3%
Orthopedic Surgery	214	$111,653,564	3.9%	2.0% - 5.8%	0.3%
Gastroenterology	144	$106,354,336	10.9%	6.7% - 15.1%	0.3%
Otolaryngology	43	$99,364,238	10.5%	(0.8%) - 21.7%	0.3%
Unknown Provider Type	134	$98,200,278	23.7%	14.5% - 33.0%	0.3%
Portable X-Ray Supplier (Billing Independently)	113	$97,915,063	44.2%	22.0% - 66.4%	0.3%

Providers Billing to Part B	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Clinical Social Worker	125	$93,845,897	16.5%	5.8% - 27.1%	0.3%
Anesthesiology	153	$91,721,922	5.4%	(0.9%) - 11.6%	0.3%
Interventional Cardiology	228	$78,850,601	8.6%	4.2% - 13.0%	0.2%
Optometry	105	$74,715,012	6.8%	2.1% - 11.5%	0.2%
Urology	97	$61,658,919	3.4%	0.5% - 6.3%	0.2%
Occupational Therapist in Private Practice	59	$60,521,693	12.6%	2.9% - 22.2%	0.2%
Infectious Disease	71	$55,785,217	13.7%	4.9% - 22.4%	0.2%
Vascular Surgery	51	$54,356,908	7.9%	(0.4%) - 16.2%	0.2%
General Surgery	92	$52,048,614	4.8%	1.2% - 8.4%	0.2%
Rheumatology	183	$40,273,722	1.5%	0.2% - 2.9%	0.1%
Pathology	158	$37,300,810	4.2%	1.1% - 7.2%	0.1%
Pain Management	111	$28,204,506	5.9%	2.3% - 9.5%	0.1%
Critical Care (Intensivists)	50	$27,989,991	11.7%	4.1% - 19.2%	0.1%
Endocrinology	44	$15,939,220	2.9%	(0.3%) - 6.2%	0.0%
Medical Oncology	134	$13,189,191	0.9%	0.1% - 1.7%	0.0%
Centralized Flu	102	$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)	169	$0	0.0%	0.0% - 0.0%	0.0%
Overall (Incl. Codes Not Listed)	**17,000**	**$11,452,231,470**	**10.3%**	**9.5% - 11.2%**	**35.0%**

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

Providers Billing to DMEPOS	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
Medical supply company not included in 51, 52, or 53	5,072	$1,094,758,346	24.3%	21.4% - 27.3%	3.3%
Pharmacy	3,100	$375,547,319	15.1%	12.8% - 17.5%	1.1%
Medical Supply Company with Respiratory Therapist	1,078	$228,240,443	23.2%	13.2% - 33.1%	0.7%
All Provider Types With Less Than 30 Claims	315	$48,864,827	40.9%	21.3% - 60.5%	0.1%
Medical supply company with orthotic personnel certified by an accrediting organization	184	$35,945,557	30.7%	15.8% - 45.7%	0.1%
Podiatry	140	$29,751,427	46.0%	29.2% - 62.7%	0.1%
Orthopedic Surgery	262	$23,617,630	30.5%	20.8% - 40.2%	0.1%
General Practice	136	$20,084,599	38.1%	16.2% - 60.0%	0.1%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	116	$17,533,472	15.6%	3.2% - 28.0%	0.1%
Individual prosthetic personnel certified by an accrediting organization	189	$14,606,810	9.7%	2.3% - 17.0%	0.0%
Supplier of oxygen and/or oxygen related equipment	67	$11,787,745	16.0%	(3.6%) - 35.5%	0.0%
Optometry	33	$8,996,481	61.1%	41.5% - 80.7%	0.0%
Individual orthotic personnel certified by an accrediting organization	193	$7,343,640	4.4%	0.4% - 8.4%	0.0%
Multispecialty Clinic or Group Practice	79	$4,151,729	23.1%	8.1% - 38.1%	0.0%
Individual prosthetic/orthotic personnel certified by an accrediting organization	36	$251,856	0.6%	(0.3%) - 1.5%	0.0%
Overall (Incl. Codes Not Listed)	**11,000**	**$1,921,481,880**	**21.4%**	**19.4% - 23.4%**	**5.9%**

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

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

Providers Billing to Part A Excluding Hospital IPPS	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
SNF	1,722	$5,883,661,927	17.2%	14.8% - 19.6%	18.0%
OPPS, Laboratory, Ambulatory	2,399	$2,579,466,109	3.1%	2.2% - 4.1%	7.9%
Hospice	897	$1,835,884,001	7.1%	4.9% - 9.3%	5.6%
Inpatient Rehabilitation Hospitals	278	$1,368,903,051	29.4%	22.7% - 36.0%	4.2%
HHA	1,252	$1,076,295,257	6.7%	5.2% - 8.2%	3.3%
Inpatient Rehab Unit	334	$659,057,300	22.1%	15.3% - 28.8%	2.0%
CAH Outpatient Services	283	$409,970,624	5.7%	3.3% - 8.2%	1.3%
Inpatient CAH	323	$183,399,495	8.8%	4.0% - 13.5%	0.6%
All Codes With Less Than 30 Claims	38	$85,185,165	12.9%	(1.5%) - 27.4%	0.3%
ESRD	636	$41,451,667	0.5%	0.1% - 0.9%	0.1%
FQHC	76	$34,348,774	3.0%	(1.3%) - 7.4%	0.1%
RHC	124	$19,567,867	1.4%	(0.2%) - 2.9%	0.1%
CORF	72	$10,823,888	45.4%	27.3% - 63.5%	0.0%
Other MAC Service Types	10	$2,700,772	4.5%	(2.5%) - 11.4%	0.0%
Non PPS Short Term Hospital Inpatient	62	$0	0.0%	0.0% - 0.0%	0.0%
Overall (Incl. Codes Not Listed)	**8,506**	**$14,190,715,897**	**7.6%**	**6.7% - 8.4%**	**43.4%**

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

Providers Billing to Part A Hospital IPPS	Claims Reviewed	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Percent of Overall Improper Payments
DRG Short Term	12,945	$4,860,116,167	4.8%	4.4% - 5.2%	14.8%
Other MAC Service Type	400	$243,778,479	9.9%	5.4% - 14.4%	0.7%
DRG Long Term	155	$65,041,010	3.0%	0.5% - 5.6%	0.2%
Overall (Incl. Codes Not Listed)	**13,500**	**$5,168,935,656**	**4.9%**	**4.5% - 5.3%**	**15.8%**

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

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

Provider Types Billing to Part B	Improper Payment Rate	Claims Reviewed	Percentage of Provider Type Improper Payments by Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Portable X-Ray Supplier (Billing Independently)	44.2%	113	0.0%	97.3%	0.0%	0.0%	2.7%
Chiropractic	33.6%	156	2.4%	95.5%	0.6%	0.7%	0.9%
Clinical Laboratory (Billing Independently)	25.5%	3,766	4.5%	83.0%	4.4%	1.1%	7.1%
Unknown Provider Type	23.7%	134	4.6%	92.3%	0.0%	0.0%	3.2%
Clinical Psychologist	20.8%	93	6.4%	87.8%	0.0%	3.2%	2.6%
Pulmonary Disease	19.7%	133	3.1%	58.4%	0.0%	37.2%	1.3%
Cardiac Electrophysiology	19.3%	62	2.5%	83.4%	0.0%	13.8%	0.3%
Nephrology	18.6%	377	6.5%	76.7%	0.0%	15.9%	1.0%
Radiation Oncology	16.9%	138	5.1%	94.9%	0.0%	0.0%	0.0%
Clinical Social Worker	16.5%	125	20.1%	77.1%	0.0%	2.8%	0.0%
Physical Therapist in Private Practice	15.8%	568	8.3%	88.6%	0.0%	1.5%	1.6%
Ambulatory Surgical Center	14.7%	275	34.0%	58.8%	0.0%	7.2%	0.0%
Internal Medicine	14.2%	1,237	13.2%	52.7%	0.0%	33.0%	1.2%
Psychiatry	14.2%	120	15.0%	51.5%	0.0%	33.5%	0.0%
Physical Medicine and Rehabilitation	13.9%	165	5.3%	54.0%	0.0%	37.6%	3.1%
IDTF	13.9%	366	0.0%	95.8%	0.0%	0.0%	4.2%
Infectious Disease	13.7%	71	7.4%	12.7%	0.0%	79.9%	0.0%
Ambulance Service Supplier (e.g., private ambulance companies)	13.2%	423	0.0%	63.5%	27.5%	1.0%	8.0%
Occupational Therapist in Private Practice	12.6%	59	0.0%	93.4%	0.0%	6.6%	0.0%
Nurse Practitioner	11.9%	999	14.3%	55.9%	0.6%	26.0%	3.2%
Critical Care (Intensivists)	11.7%	50	24.3%	28.6%	0.0%	47.0%	0.0%
Family Practice	11.4%	738	7.6%	65.9%	0.0%	22.8%	3.7%
Podiatry	11.2%	245	7.2%	76.4%	4.4%	11.5%	0.6%
Gastroenterology	10.9%	144	3.6%	65.9%	0.0%	30.5%	0.0%
Otolaryngology	10.5%	43	0.0%	77.7%	0.0%	22.3%	0.0%
Hospitalist	10.4%	240	4.7%	22.6%	0.0%	59.3%	13.5%
Emergency Medicine	10.4%	527	15.3%	22.1%	0.0%	58.5%	4.0%
All Provider Types With Less Than 30 Claims	8.9%	587	16.6%	63.7%	0.0%	15.5%	4.2%
Interventional Cardiology	8.6%	228	5.0%	49.4%	0.3%	36.4%	8.9%
Vascular Surgery	7.9%	51	0.0%	58.7%	0.0%	18.5%	22.8%
Cardiology	7.8%	571	4.2%	58.5%	0.0%	31.8%	5.5%

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
Neurology	7.3%	178	28.8%	19.4%	0.8%	49.8%	1.3%
Diagnostic Radiology	7.2%	750	19.6%	68.8%	0.0%	8.4%	3.1%
Optometry	6.8%	105	0.0%	50.5%	0.0%	47.1%	2.4%
Physician Assistant	6.4%	407	7.9%	35.8%	0.0%	52.8%	3.6%
Hematology/Oncology	6.0%	473	9.1%	36.4%	34.3%	20.2%	0.0%
Pain Management	5.9%	111	16.7%	81.0%	0.0%	2.3%	0.0%
Anesthesiology	5.4%	153	59.5%	34.8%	0.0%	4.1%	1.6%
Dermatology	5.1%	234	2.4%	65.0%	0.0%	26.7%	5.9%
General Surgery	4.8%	92	41.8%	22.8%	0.0%	35.4%	0.0%
Pathology	4.2%	158	10.9%	83.7%	0.0%	0.0%	5.4%
Orthopedic Surgery	3.9%	214	6.5%	48.3%	0.0%	45.2%	0.0%
Urology	3.4%	97	4.7%	76.2%	0.0%	17.2%	1.9%
Ophthalmology	3.2%	596	3.4%	80.4%	0.0%	15.5%	0.7%
Endocrinology	2.9%	44	40.9%	18.1%	0.0%	41.0%	0.0%
Rheumatology	1.5%	183	0.0%	63.8%	0.0%	36.2%	0.0%
Medical Oncology	0.9%	134	0.0%	30.3%	0.0%	69.7%	0.0%
Centralized Flu	0.0%	102	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%	169	N/A	N/A	N/A	N/A	N/A
All Provider Types	**10.3%**	**17,000**	**10.2%**	**65.3%**	**2.8%**	**18.5%**	**3.2%**

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

Provider Types Billing to DMEPOS	Improper Payment Rate	Claims Reviewed	Percentage of Provider Type Improper Payments by Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Optometry	61.1%	33	7.4%	36.5%	21.2%	0.0%	34.9%
Podiatry	46.0%	140	3.5%	74.7%	0.2%	0.1%	21.6%
All Provider Types With Less Than 30 Claims	40.9%	315	1.6%	82.0%	5.2%	0.0%	11.2%
General Practice	38.1%	136	0.7%	88.4%	0.8%	0.6%	9.5%
Medical supply company with orthotic personnel certified by an accrediting organization	30.7%	184	44.8%	27.5%	2.6%	0.0%	25.1%
Orthopedic Surgery	30.5%	262	0.5%	76.9%	2.9%	0.0%	19.7%
Medical supply company not included in 51, 52, or 53	24.3%	5,072	42.5%	38.8%	7.0%	0.2%	11.4%
Medical Supply Company with Respiratory Therapist	23.2%	1,078	21.8%	35.5%	28.8%	0.2%	13.7%
Multispecialty Clinic or Group Practice	23.1%	79	4.2%	56.9%	3.2%	2.6%	33.1%
Supplier of oxygen and/or oxygen related equipment	16.0%	67	0.0%	25.8%	54.4%	0.0%	19.7%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	15.6%	116	0.0%	70.7%	19.6%	0.4%	9.3%
Pharmacy	15.1%	3,100	6.9%	62.4%	9.3%	0.7%	20.6%
Individual prosthetic personnel certified by an accrediting organization	9.7%	189	0.2%	70.5%	2.7%	0.1%	26.5%
Individual orthotic personnel certified by an accrediting organization	4.4%	193	9.0%	83.0%	0.0%	0.0%	7.9%
Individual prosthetic/orthotic personnel certified by an accrediting organization	0.6%	36	0.0%	100.0%	0.0%	0.0%	0.0%
All Provider Types	**21.4%**	**11,000**	**29.2%**	**46.1%**	**10.1%**	**0.3%**	**14.3%**

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	45.4%	72	0.0%	84.3%	0.0%	1.2%	14.5%
Inpatient Rehabilitation Hospitals	29.4%	278	0.0%	6.2%	93.8%	0.0%	0.0%
Inpatient Rehab Unit	22.1%	334	3.1%	10.8%	86.0%	0.0%	0.1%
SNF	17.2%	1,722	3.7%	76.4%	0.0%	0.4%	19.6%
All Codes With Less Than 30 Claims	12.9%	38	0.0%	72.1%	27.9%	0.0%	0.0%
Inpatient CAH	8.8%	323	0.0%	19.3%	80.7%	0.0%	0.0%
Hospice	7.1%	897	14.6%	65.1%	16.3%	1.5%	2.4%
HHA	6.7%	1,252	2.3%	51.4%	33.7%	3.4%	9.2%
CAH Outpatient Services	5.7%	283	1.8%	94.4%	1.7%	2.0%	0.0%
Other MAC Service Types	4.5%	10	0.0%	0.0%	100.0%	0.0%	0.0%
OPPS, Laboratory, Ambulatory	3.1%	2,399	3.5%	90.2%	4.2%	1.7%	0.4%
FQHC	3.0%	76	0.0%	100.0%	0.0%	0.0%	0.0%
RHC	1.4%	124	0.0%	100.0%	0.0%	0.0%	0.0%
ESRD	0.5%	636	0.0%	93.4%	0.0%	3.8%	2.9%
Non PPS Short Term Hospital Inpatient	0.0%	62	N/A	N/A	N/A	N/A	N/A
All Provider Types	**7.6%**	**8,506**	**4.4%**	**65.6%**	**19.8%**	**1.0%**	**9.2%**

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

Provider Types Billing to Part A Hospital IPPS	Improper Payment Rate	Claims Reviewed	Percentage of Provider Type Improper Payments by Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Other MAC Service Types	9.9%	400	4.7%	66.6%	8.4%	8.3%	12.0%
DRG Short Term	4.8%	12,945	4.6%	22.5%	54.1%	18.4%	0.5%
DRG Long Term	3.0%	155	21.5%	36.0%	40.5%	2.0%	0.0%
All Provider Types	**4.9%**	**13,500**	**4.8%**	**24.7%**	**51.8%**	**17.7%**	**1.0%**

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)	$564,563,132	5.0%	3.8% - 6.2%	20.1%	16.5%	0.0%	63.4%	0.0%	1.7%
All Codes With Less Than 30 Claims	$529,989,600	24.4%	18.1% - 30.7%	10.4%	75.9%	4.3%	6.7%	2.8%	1.6%
Sbsq hosp ip/obs high 50 (99233)	$481,702,364	20.4%	17.3% - 23.5%	4.8%	27.2%	0.0%	65.8%	2.2%	1.5%
1st hosp ip/obs high 75 (99223)	$324,835,303	20.8%	18.0% - 23.7%	5.9%	31.8%	0.0%	60.4%	1.9%	1.0%
Office o/p est hi 40-54 min (99215)	$210,260,627	11.2%	9.1% - 13.3%	3.0%	5.9%	0.0%	90.6%	0.5%	0.6%
Critical care first hour (99291)	$207,306,411	17.2%	12.4% - 22.0%	13.0%	20.4%	0.0%	66.6%	0.0%	0.6%
Office o/p est low 20-29 min (99213)	$206,566,076	3.5%	0.8% - 6.2%	34.2%	18.4%	0.0%	47.5%	0.0%	0.6%
Sbsq hosp ip/obs moderate 35 (99232)	$195,731,555	8.3%	2.3% - 14.3%	34.3%	46.2%	0.0%	13.4%	6.2%	0.6%
Chrnc care mgmt staff 1st 20 (99490)	$178,140,753	66.2%	56.2% - 76.2%	14.0%	86.0%	0.0%	0.0%	0.0%	0.5%
Emergency dept visit hi mdm (99285)	$161,445,407	11.3%	8.9% - 13.8%	11.8%	13.6%	0.0%	74.6%	0.0%	0.5%
Office o/p new mod 45-59 min (99204)	$118,232,335	6.2%	3.0% - 9.4%	17.0%	10.1%	0.0%	72.9%	0.0%	0.4%
Transj care mgmt high f2f 7d (99496)	$93,106,256	60.4%	52.0% - 68.7%	2.4%	72.8%	0.0%	13.1%	11.6%	0.3%
Sbsq nf care moderate mdm 30 (99309)	$90,026,270	9.7%	4.7% - 14.7%	37.3%	33.5%	0.0%	29.2%	0.0%	0.3%
Office o/p new hi 60-74 min (99205)	$81,567,143	14.9%	10.7% - 19.2%	0.0%	6.2%	0.0%	78.5%	15.2%	0.2%
Office o/p new low 30-44 min (99203)	$65,714,213	6.6%	2.2% - 11.0%	0.0%	0.0%	0.0%	35.9%	64.1%	0.2%
1st nf care high mdm 45 (99306)	$64,803,253	32.9%	26.7% - 39.1%	24.3%	7.6%	0.0%	61.4%	6.7%	0.2%
Sbsq nf care high mdm 45 (99310)	$61,174,049	25.2%	18.9% - 31.4%	9.9%	35.1%	0.0%	55.0%	0.0%	0.2%
1st hosp ip/obs moderate 55 (99222)	$56,667,958	8.6%	4.5% - 12.7%	0.0%	47.1%	0.0%	43.4%	9.6%	0.2%
Transj care mgmt mod f2f 14d (99495)	$54,369,590	49.0%	38.9% - 59.2%	4.4%	84.3%	0.0%	2.9%	8.4%	0.2%
Emergency dept visit mod mdm (99284)	$46,715,579	9.2%	4.4% - 14.0%	20.6%	32.6%	0.0%	46.8%	0.0%	0.1%
Office o/p est sf 10-19 min (99212)	$38,653,417	10.1%	4.9% - 15.2%	15.9%	47.2%	0.0%	36.9%	0.0%	0.1%
Hosp ip/obs dschrg mgmt >30 (99239)	$33,303,822	7.9%	4.7% - 11.1%	9.0%	23.3%	0.0%	61.2%	6.5%	0.1%
Sbsq nf care low mdm 15 (99308)	$23,087,238	5.3%	(0.1%) - 10.7%	27.7%	57.7%	0.0%	14.6%	0.0%	0.1%
Initial observation care (99220)	$22,607,026	20.2%	12.0% - 28.4%	17.0%	47.6%	0.0%	35.4%	0.0%	0.1%
Off/op est may x req phy/qhp (99211)	$10,422,153	27.2%	15.6% - 38.8%	2.9%	72.6%	0.0%	24.5%	0.0%	0.0%
Overall (E&M Codes)	**$3,920,991,531**	**10.3%**	**9.4% - 11.2%**	**13.1%**	**34.1%**	**0.0%**	**49.1%**	**3.7%**	**12.0%**

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

Final E & M Codes	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office o/p est mod 30-39 min (99214)	$307,930,391	2.7%	2.1% - 3.3%
Sbsq hosp ip/obs high 50 (99233)	$297,277,879	12.6%	11.0% - 14.2%
Office o/p est hi 40-54 min (99215)	$148,814,787	7.9%	6.4% - 9.4%
1st hosp ip/obs high 75 (99223)	$131,625,394	8.4%	7.2% - 9.7%
Emergency dept visit hi mdm (99285)	$101,781,717	7.1%	5.6% - 8.7%
Office o/p est low 20-29 min (99213)	$98,035,520	1.7%	0.7% - 2.7%
Office o/p new mod 45-59 min (99204)	$86,152,469	4.5%	2.3% - 6.7%
Office o/p new hi 60-74 min (99205)	$53,471,071	9.8%	7.3% - 12.3%
Sbsq hosp ip/obs moderate 35 (99232)	$25,767,324	1.1%	0.1% - 2.1%
Sbsq nf care high mdm 45 (99310)	$25,030,746	10.3%	6.9% - 13.7%
Office o/p new low 30-44 min (99203)	$23,615,620	2.4%	0.4% - 4.4%
Sbsq nf care moderate mdm 30 (99309)	$21,022,958	2.3%	0.8% - 3.7%
1st nf care high mdm 45 (99306)	$20,057,660	10.2%	7.5% - 12.9%
Hosp ip/obs dschrg mgmt >30 (99239)	$18,892,383	4.5%	2.6% - 6.4%
Emergency dept visit mod mdm (99284)	$15,793,943	3.1%	1.0% - 5.2%
1st hosp ip/obs moderate 55 (99222)	$14,683,206	2.2%	0.9% - 3.5%
Office o/p est sf 10-19 min (99212)	$13,956,808	3.6%	0.8% - 6.4%
Transj care mgmt high f2f 7d (99496)	$9,768,448	6.3%	4.2% - 8.5%
Initial observation care (99220)	$7,532,659	6.7%	3.7% - 9.7%
Sbsq nf care low mdm 15 (99308)	$3,364,755	0.8%	(0.5%) - 2.0%
All Other Codes	$53,075,745	0.1%	(0.0%) - 0.1%
Overall (1-Level E&M Codes)	**$1,477,651,483**	**1.3%**	**1.2% - 1.5%**

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

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

Part B Services (BETOS Codes)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Office visits - established	$581,551,157	3.0%	2.5% - 3.5%
Hospital visit - subsequent	$337,415,413	6.2%	5.2% - 7.2%
Hospital visit - initial	$226,572,437	9.1%	7.9% - 10.4%
Office visits - new	$158,568,124	4.3%	3.0% - 5.6%
Emergency room visit	$148,818,830	7.2%	5.6% - 8.7%
Hospital visit - critical care	$141,077,034	11.4%	6.9% - 15.8%
Nursing home visit	$124,836,566	5.6%	4.1% - 7.2%
Major procedure - Other	$46,591,145	2.0%	(1.7%) - 5.7%
Specialist - other	$23,027,247	0.8%	0.4% - 1.2%
Minor procedures - other (Medicare fee schedule)	$18,895,370	0.3%	(0.0%) - 0.6%
Standard imaging - nuclear medicine	$18,314,004	2.1%	(1.9%) - 6.1%
Lab tests - other (non-Medicare fee schedule)	$13,757,990	0.3%	(0.1%) - 0.7%
Ambulatory procedures - other	$3,769,011	0.5%	(0.5%) - 1.4%
Ambulatory procedures - skin	$3,358,195	0.1%	(0.1%) - 0.4%
Dialysis services (Medicare Fee Schedule)	$1,649,095	0.2%	(0.1%) - 0.5%
Chiropractic	$1,162,192	0.2%	(0.2%) - 0.6%
Minor procedures - skin	$705,403	0.1%	(0.1%) - 0.2%
Other - non-Medicare fee schedule	$648,831	1.3%	(1.1%) - 3.8%
Other drugs	$557,679	0.0%	0.0% - 0.0%
Other tests - electrocardiograms	$288,423	0.1%	(0.1%) - 0.3%
All Other Codes	$45,075,321	0.1%	(0.0%) - 0.2%
Overall (Part B)	**$1,896,639,466**	**1.7%**	**1.5% - 1.9%**

Table K4: Type of Services with Upcoding Errors: DMEPOS

DMEPOS (Policy Group)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Surgical Dressings	$2,240,431	0.7%	0.2% - 1.3%
Infusion Pumps & Related Drugs	$1,605,533	0.3%	(0.1%) - 0.6%
CPAP	$418,319	0.0%	(0.0%) - 0.1%
Urological Supplies	$400,216	0.1%	(0.0%) - 0.1%
All Policy Groups with Less than 30 Claims	$158,460	0.0%	(0.0%) - 0.1%
Lower Limb Prostheses	$91,776	0.0%	(0.0%) - 0.1%
Parenteral Nutrition	$39,233	0.0%	(0.0%) - 0.0%
Nebulizers & Related Drugs	$34,595	0.0%	(0.0%) - 0.0%
Enteral Nutrition	$4,298	0.0%	(0.0%) - 0.0%
Overall (DMEPOS)	**$4,992,860**	**0.1%**	**0.0% - 0.1%**

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

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

Part A Excluding Hospital IPPS Services (TOB)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval
Hospital Outpatient	$36,420,220	0.0%	0.0% - 0.1%
Home Health	$24,555,410	0.2%	(0.0%) - 0.3%
SNF Inpatient	$19,003,997	0.1%	0.0% - 0.1%
Hospital based hospice	$10,299,297	0.6%	(0.6%) - 1.7%
Clinic ESRD	$1,563,505	0.0%	(0.0%) - 0.1%
CAH	$1,230,880	0.0%	(0.0%) - 0.0%
Clinic CORF	$133,665	0.6%	(0.3%) - 1.4%
Nonhospital based hospice	$80,744	0.0%	(0.0%) - 0.0%
Overall (Part A Excluding Hospital IPPS)	**$93,287,718**	**0.0%**	**0.0% - 0.1%**

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
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	$50,474,142	0.5%	(0.2%) - 1.3%
Heart Failure & Shock (291, 292, 293)	$34,130,430	1.0%	(0.8%) - 2.8%
Major Chest Procedures (163, 164, 165)	$23,166,716	2.6%	(1.1%) - 6.3%
Kidney & Urinary Tract Infections (689, 690)	$22,903,437	2.2%	(0.5%) - 5.0%
Simple Pneumonia & Pleurisy (193, 194, 195)	$21,698,634	1.4%	(0.7%) - 3.4%
Intracranial Hemorrhage Or Cerebral Infarction (064, 065, 066)	$21,293,253	1.4%	(0.5%) - 3.3%
Revision Of Hip Or Knee Replacement (466, 467, 468)	$19,811,022	2.8%	(1.1%) - 6.8%
Extensive OR Procedure Unrelated To Principal Diagnosis (981, 982, 983)	$15,849,316	1.3%	(0.7%) - 3.3%
Extracranial Procedures (037, 038, 039)	$14,849,163	6.1%	(3.2%) - 15.4%
GI Hemorrhage (377, 378, 379)	$11,650,460	0.9%	(0.2%) - 1.9%
Seizures (100, 101)	$10,725,089	2.2%	(0.5%) - 4.8%
AMI, Discharged Alive (280, 281, 282)	$10,472,319	0.8%	0.1% - 1.5%
Major Gastrointestinal Disorders & Peritoneal Infections (371, 372, 373)	$10,164,045	4.0%	(0.2%) - 8.1%
Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463, 464, 465)	$9,944,553	2.1%	(0.4%) - 4.7%
Permanent Cardiac Pacemaker Implant (242, 243, 244)	$8,970,188	1.1%	(0.3%) - 2.5%
Non-Extensive OR Proc Unrelated To Principal Diagnosis (987, 988, 989)	$8,938,354	2.9%	0.3% - 5.4%
Major Small & Large Bowel Procedures (329, 330, 331)	$7,925,097	0.4%	(0.3%) - 1.1%
Respiratory Infections & Inflammations (177, 178, 179)	$7,366,134	0.2%	0.0% - 0.4%
Infectious & Parasitic Diseases W OR Procedure (853, 854, 855)	$6,903,686	0.2%	(0.1%) - 0.4%
Circulatory Disorders Except AMI, W Card Cath (286, 287)	$6,006,852	0.6%	(0.5%) - 1.7%
All Other Codes	$245,552,018	0.3%	0.2% - 0.5%
Overall (Part A Hospital IPPS)	**$568,794,906**	**0.5%**	**0.4% - 0.7%**

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	5,993	12,523	$309,771	$1,465,120	$3,592,111,100	9.3%	7.2% - 11.4%
Office o/p est mod 30-39 min (99214)	786	786	$4,934	$92,619	$557,968,020	4.9%	3.7% - 6.1%
Sbsq hosp ip/obs high 50 (99233)	523	698	$14,517	$71,090	$480,364,324	20.3%	17.2% - 23.5%
1st hosp ip/obs high 75 (99223)	471	471	$16,972	$83,336	$324,835,303	20.8%	18.0% - 23.7%
Ppps, subseq visit (G0439)	302	302	$9,626	$35,305	$307,494,660	24.5%	17.5% - 31.5%
Xcapsl ctrc rmvl w/o ecp (66984)	178	178	$18,483	$111,489	$294,313,205	15.9%	9.3% - 22.6%
Therapeutic exercises (97110)	284	305	$1,888	$11,588	$238,586,544	16.2%	11.6% - 20.9%
Office o/p est hi 40-54 min (99215)	317	317	$6,199	$52,275	$210,260,627	11.2%	9.1% - 13.3%
Critical care first hour (99291)	319	399	$14,309	$81,142	$207,306,411	17.2%	12.4% - 22.0%
Therapeutic activities (97530)	289	310	$2,501	$16,130	$193,645,517	17.1%	11.5% - 22.8%
Chrnc care mgmt staff 1st 20 (99490)	108	109	$4,193	$6,132	$178,140,753	66.2%	56.2% - 76.2%
Sbsq hosp ip/obs moderate 35 (99232)	239	414	$2,156	$30,125	$170,217,426	7.2%	1.2% - 13.2%
Emergency dept visit hi mdm (99285)	324	324	$6,158	$52,983	$161,445,407	11.3%	8.9% - 13.8%
BLS-emergency (A0429)	141	141	$6,996	$46,715	$159,502,466	20.1%	5.8% - 34.3%
Chiropract manj 3-4 regions (98941)	122	129	$1,761	$4,770	$149,711,667	32.9%	23.3% - 42.5%
Office o/p est low 20-29 min (99213)	293	293	$575	$24,112	$147,132,517	2.5%	(0.1%) - 5.1%
BLS (A0428)	159	165	$7,209	$31,906	$143,956,010	18.7%	7.0% - 30.5%
Ground mileage (A0425)	210	212	$2,468	$17,576	$138,448,004	16.0%	4.4% - 27.6%
Cov-19 amp prb hgh thruput (U0003)	314	314	$8,175	$18,450	$126,976,556	42.6%	36.1% - 49.0%
Neuromuscular reeducation (97112)	349	359	$2,153	$15,200	$121,985,490	15.9%	10.2% - 21.5%
All Other Codes	11,764	18,283	$2,215,224	$19,086,394	$3,329,334,229	9.7%	9.0% - 10.5%
Total (Part B)	**17,000**	**37,032**	**$2,656,267**	**$21,354,455**	**$11,233,736,235**	**10.1%**	**9.3% - 11.0%**

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

DMEPOS (HCPCS)	Claims Reviewed	Lines Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,858	5,993	$292,158	$2,505,890	$372,084,521	20.6%	12.9% - 28.2%
Coude tip urinary catheter (A4352)	221	320	$181,160	$373,898	$185,011,752	54.6%	42.7% - 66.5%
Ther cgm supply allowance (K0553)	302	717	$107,175	$147,947	$168,499,768	30.7%	24.2% - 37.2%
Oxygen concentrator (E1390)	427	430	$4,967	$44,317	$62,919,831	10.9%	7.7% - 14.1%
Intermittent urinary cath (A4353)	53	64	$29,069	$59,138	$60,239,875	75.3%	57.7% - 92.9%
Home vent non-invasive inter (E0466)	488	492	$67,060	$511,424	$58,902,582	13.3%	10.1% - 16.6%
Non-adju cgm supply allow (A4239)	161	163	$5,476	$39,204	$56,822,377	14.0%	6.3% - 21.6%
Collagen dressing >48 sq in (A6023)	68	106	$241,873	$273,154	$44,477,643	94.6%	90.3% - 98.9%
Hizentra injection (J1559)	54	64	$44,856	$222,391	$37,307,592	19.5%	6.7% - 32.4%
Parenteral sol 74-100 gm pro (B4197)	157	176	$99,789	$291,649	$36,624,238	34.4%	25.4% - 43.4%
Collagen dressing <=16 sq in (A6021)	305	335	$133,752	$229,348	$33,360,471	59.4%	50.6% - 68.2%
Collagen based wound filler (A6010)	66	67	$40,447	$75,614	$28,326,649	52.1%	36.8% - 67.5%
Replacement facemask interfa (A7031)	400	406	$6,815	$40,913	$26,898,591	15.5%	10.9% - 20.1%
CPAP full face mask (A7030)	228	228	$3,876	$26,126	$26,235,555	14.8%	10.0% - 19.6%
Ther cgm receiver/monitor (K0554)	138	139	$12,175	$20,969	$25,953,132	65.7%	44.3% - 87.2%
LSO sc r ant/pos pnl pre cst (L0637)	63	63	$46,480	$64,379	$25,944,166	74.3%	60.9% - 87.6%
Ko single upright pre cst (L1843)	70	97	$56,773	$77,339	$24,753,732	79.8%	69.8% - 89.8%
Tacrol envarsus ex rel oral (J7503)	54	55	$10,113	$30,566	$24,329,659	34.6%	15.4% - 53.7%
Insulin for insulin pump use (J1817)	168	168	$39,857	$144,317	$24,120,672	28.2%	20.0% - 36.5%
Ko double upright prefab ots (L1852)	49	78	$33,817	$46,115	$21,660,262	60.8%	40.8% - 80.8%
All Other Codes	7,881	13,840	$800,469	$7,174,178	$570,496,460	15.6%	14.2% - 16.9%
Total (DMEPOS)	**11,000**	**24,001**	**$2,258,158**	**$12,398,875**	**$1,914,969,528**	**21.3%**	**19.3% - 23.4%**

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	1,577	$2,716,648	$12,935,942	$5,579,180,666	17.8%	15.3% - 20.3%
Hospital Outpatient	2,247	$94,070	$3,692,904	$2,496,888,786	3.3%	2.2% - 4.3%
Hospital Inpatient (Part A)	1,016	$4,478,220	$20,010,394	$2,244,462,381	20.4%	16.8% - 24.0%
Nonhospital based hospice	745	$227,063	$2,973,863	$1,627,585,993	6.8%	4.4% - 9.1%
Home Health	1,250	$222,313	$2,174,617	$1,063,855,623	6.6%	5.1% - 8.1%
CAH	283	$9,799	$183,216	$374,842,514	5.3%	2.8% - 7.7%
SNF Inpatient Part B	93	$7,038	$81,554	$222,872,812	8.7%	(0.8%) - 18.2%
Hospital based hospice	152	$70,592	$609,213	$190,242,867	10.8%	5.8% - 15.8%
Hospital Other Part B	102	$512	$5,044	$55,575,945	10.3%	4.1% - 16.5%
Clinic OPT	29	$1,061	$9,485	$54,783,402	9.4%	(4.4%) - 23.1%
Clinic ESRD	636	$10,005	$1,952,453	$41,451,667	0.5%	0.1% - 0.9%
FQHC	76	$304	$11,101	$34,348,774	3.0%	(1.3%) - 7.4%
SNF Outpatient	52	$3,103	$24,833	$24,049,232	11.9%	1.0% - 22.9%
Hospital Inpatient Part B	49	$1,743	$146,336	$19,801,171	1.2%	0.0% - 2.3%
Clinical Rural Health	124	$316	$23,123	$19,567,867	1.4%	(0.2%) - 2.9%
Clinic CORF	72	$6,057	$14,294	$10,823,888	45.4%	27.3% - 63.5%
All Other Codes	3	$0	$65,244	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**8,506**	**$7,848,844**	**$44,913,618**	**$14,060,333,588**	**7.5%**	**6.7% - 8.3%**

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

Part A Inpatient Hospital PPS Services (DRG)	Claims Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,923	$1,830,461	$47,210,817	$1,154,625,072	4.0%	3.2% - 4.7%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	585	$3,700,075	$7,534,754	$528,805,646	47.8%	43.1% - 52.5%
Percutaneous Intracardiac Procedures W/O MCC (274)	459	$4,625,630	$11,128,489	$511,070,034	42.2%	37.4% - 47.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	457	$2,405,576	$18,894,500	$201,463,359	12.9%	9.8% - 16.0%
Psychoses (885)	344	$323,407	$4,054,467	$179,313,067	7.7%	3.4% - 12.1%
Combined Anterior/Posterior Spinal Fusion W/O CC/MCC (455)	96	$918,061	$3,691,299	$170,447,055	25.4%	13.3% - 37.5%
Spinal Fusion Except Cervical W/O MCC (460)	76	$336,344	$2,103,445	$143,169,201	16.2%	7.6% - 24.7%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	284	$1,498,014	$15,429,424	$112,416,408	9.7%	6.3% - 13.1%
Heart Failure & Shock W MCC (291)	53	$14,361	$512,375	$87,631,579	2.7%	(1.1%) - 6.4%
Organic Disturbances & Intellectual Disability (884)	60	$108,292	$699,269	$64,658,595	16.3%	6.2% - 26.5%
Degenerative Nervous System Disorders W/O MCC (057)	172	$326,865	$1,932,148	$64,534,134	16.9%	10.5% - 23.3%
Cervical Spinal Fusion W CC (472)	96	$387,129	$2,189,198	$59,934,870	17.8%	9.8% - 25.7%
Combined Anterior/Posterior Spinal Fusion W CC (454)	91	$240,793	$4,373,379	$57,467,862	5.9%	1.0% - 10.9%
Syncope & Collapse (312)	66	$62,066	$478,637	$53,136,069	12.8%	4.5% - 21.2%
Transient Ischemia W/O Thrombolytic (069)	57	$82,505	$302,327	$49,926,503	28.0%	14.6% - 41.4%
Septicemia Or Severe Sepsis W/O MV >96 Hours W MCC (871)	113	$9,997	$1,773,701	$48,055,667	0.6%	(0.3%) - 1.4%
Respiratory Infections & Inflammations W MCC (177)	366	$96,625	$5,228,208	$47,439,667	1.6%	0.4% - 2.8%
Renal Failure W MCC (682)	54	$24,740	$664,005	$44,012,147	3.9%	(2.4%) - 10.2%
Medical Back Problems W/O MCC (552)	69	$61,814	$497,943	$43,190,763	12.9%	4.4% - 21.5%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O MCC (247)	97	$67,735	$1,406,608	$39,939,688	4.6%	(0.1%) - 9.3%
All Other Codes	6,982	$8,414,978	$171,071,451	$1,161,110,914	2.4%	2.0% - 2.7%
Total (Part A Hospital IPPS)	**13,500**	**$25,535,471**	**$301,176,444**	**$4,822,348,298**	**4.5%**	**4.1% - 4.9%**

Table L5: Overpayment Rate: All Claim Types

All Services	Claims Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All	**50,006**	**$38,298,740**	**$379,843,391**	**$32,031,387,649**	**7.7%**	**7.3% - 8.2%**

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	5,993	12,523	$3,116	$1,465,120	$68,063,684	0.2%	0.0% - 0.3%
Office o/p est low 20-29 min (99213)	293	293	$226	$24,112	$59,433,559	1.0%	0.2% - 1.8%
Sbsq hosp ip/obs moderate 35 (99232)	239	414	$248	$30,125	$25,514,129	1.1%	0.1% - 2.1%
Office o/p new low 30-44 min (99203)	123	123	$217	$12,123	$15,263,677	1.5%	(0.2%) - 3.2%
Office o/p est sf 10-19 min (99212)	186	186	$549	$9,057	$14,274,549	3.7%	0.9% - 6.5%
Psytx w pt 45 minutes (90834)	108	155	$258	$11,862	$6,621,726	2.0%	0.0% - 3.9%
Office o/p est mod 30-39 min (99214)	786	786	$56	$92,619	$6,595,112	0.1%	(0.1%) - 0.2%
Ground mileage (A0425)	210	212	$104	$17,576	$5,689,744	0.7%	(0.2%) - 1.5%
Emergency dept visit mod mdm (99284)	107	107	$100	$12,100	$4,057,754	0.8%	(0.3%) - 1.9%
Ther/proph/diag inj sc/im (96372)	163	163	$179	$2,419	$2,333,894	2.0%	(1.9%) - 5.9%
Rb82 rubidium (A9555)	90	91	$2,444	$68,830	$2,242,492	3.3%	0.0% - 6.5%
1st hosp ip/obs moderate 55 (99222)	117	117	$65	$14,359	$2,150,572	0.3%	(0.3%) - 1.0%
Off/op est may x req phy/qhp (99211)	100	100	$105	$1,666	$1,734,050	4.5%	(2.5%) - 11.5%
Ppps, subseq visit (G0439)	302	302	$73	$35,305	$1,703,515	0.1%	(0.1%) - 0.3%
Sbsq hosp ip/obs high 50 (99233)	523	698	$42	$71,090	$1,338,040	0.1%	(0.0%) - 0.2%
Xcapsl ctrc rmvl w/o ecp (66984)	178	178	$48	$111,489	$773,073	0.0%	(0.0%) - 0.1%
Drain/inj joint/bursa w/o us (20610)	138	142	$35	$8,857	$611,833	0.1%	(0.1%) - 0.3%
Chemo iv infusion addl hr (96415)	189	189	$129	$8,891	$51,159	1.0%	(0.2%) - 2.1%
Infliximab not biosimil 10mg (J1745)	93	120	$35	$157,995	$42,672	0.0%	(0.0%) - 0.1%
All Other Codes	12,776	20,133	$0	$19,198,862	$0	0.0%	0.0% - 0.0%
Total (Part B)	**17,000**	**37,032**	**$8,028**	**$21,354,455**	**$218,495,234**	**0.2%**	**0.1% - 0.3%**

Table M2: Service-Specific Underpayment Rates: DMEPOS

DMEPOS (HCPCS)	Claims Reviewed	Lines Reviewed	Sample Dollars Underpaid	Total Sample Dollars Paid	Projected Dollars Underpaid	Underpayment Rate	95% Confidence Interval
Hizentra injection (J1559)	54	64	$5,050	$222,391	$4,509,231	2.4%	(2.3%) - 7.0%
All Codes With Less Than 30 Claims	2,858	5,993	$2,578	$2,505,890	$1,284,737	0.1%	(0.0%) - 0.2%
Insulin for insulin pump use (J1817)	168	168	$725	$144,317	$391,784	0.5%	(0.3%) - 1.2%
Oral everolimus (J7527)	57	57	$565	$56,036	$213,370	1.3%	(1.3%) - 4.0%
Pn soln nos 10 grams lipids (B4185)	278	285	$247	$80,403	$59,080	0.2%	(0.1%) - 0.5%
Conform band s w>=3" <5"/yd (A6446)	95	99	$11	$3,809	$33,943	0.8%	(0.8%) - 2.3%
Inj milrinone lactate / 5 mg (J2260)	47	63	$9	$4,292	$6,388	0.2%	(0.2%) - 0.6%
Mycophenolic acid (J7518)	57	57	$2	$7,004	$6,300	0.0%	(0.0%) - 0.1%
Prednisone ir or dr oral 1mg (J7512)	70	70	$2	$177	$5,777	1.0%	(0.9%) - 2.9%
Sup/ext non-ins inf pump syr (K0552)	150	153	$7	$2,085	$1,309	0.2%	(0.2%) - 0.5%
Albuterol non-comp unit (J7613)	84	84	$0	$702	$433	0.0%	(0.0%) - 0.0%
All Other Codes	9,579	16,908	$0	$9,371,771	$0	0.0%	0.0% - 0.0%
Total (DMEPOS)	**11,000**	**24,001**	**$9,194**	**$12,398,875**	**$6,512,353**	**0.1%**	**(0.0%) - 0.2%**

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
SNF Inpatient	1,577	1,577	$21,315	$12,935,942	$55,942,096	0.2%	(0.0%) - 0.4%
CAH	283	283	$836	$183,216	$35,128,110	0.5%	(0.2%) - 1.2%
Nonhospital based hospice	745	745	$2,734	$2,973,863	$17,666,785	0.1%	(0.0%) - 0.2%
Home Health	1,250	1,250	$1,740	$2,174,617	$12,439,634	0.1%	(0.0%) - 0.2%
Hospital Outpatient	2,247	2,247	$277	$3,692,904	$7,115,138	0.0%	(0.0%) - 0.0%
SNF Inpatient Part B	93	93	$54	$81,554	$1,617,119	0.1%	(0.1%) - 0.2%
Hospital based hospice	152	152	$151	$609,213	$388,357	0.0%	(0.0%) - 0.1%
Hospital Other Part B	102	102	$1	$5,044	$85,069	0.0%	(0.0%) - 0.0%
All Other Codes	2,057	2,057	$0	$22,257,263	$0	0.0%	0.0% - 0.0%
Total (Part A Excluding Hospital IPPS)	**8,506**	**8,506**	**$27,108**	**$44,913,618**	**$130,382,308**	**0.1%**	**0.0% - 0.1%**

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

Part A Hospital IPPS Services (DRG)	Claims Reviewed	Lines Reviewed	Sample Dollars Underpaid	Total Sample Dollars Paid	Projected Dollars Underpaid	Underpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,923	2,923	$202,699	$47,210,817	$126,561,328	0.4%	0.3% - 0.6%
Cardiac Valve & Oth Maj Cardiothoracic Proc W/O Card Cath W CC (220)	89	89	$208,308	$3,835,541	$23,528,200	5.5%	(3.7%) - 14.7%
Psychoses (885)	344	344	$29,080	$4,054,467	$19,282,583	0.8%	(0.7%) - 2.4%
Respiratory Infections & Inflammations W CC (178)	44	44	$10,983	$576,231	$11,454,984	1.8%	(0.8%) - 4.5%
Simple Pneumonia & Pleurisy W MCC (193)	44	44	$4,437	$438,568	$10,772,313	0.9%	(0.8%) - 2.6%
Seizures W MCC (100)	34	34	$16,616	$501,072	$10,017,231	3.3%	(1.7%) - 8.2%
Intracranial Hemorrhage Or Cerebral Infarction W CC Or TPA In 24 Hrs (065)	48	48	$5,114	$368,843	$9,434,192	1.6%	(1.5%) - 4.7%
Septicemia Or Severe Sepsis W/O MV >96 Hours W/O MCC (872)	153	153	$17,602	$1,234,173	$9,035,003	1.2%	(0.1%) - 2.5%
Renal Failure W CC (683)	114	114	$14,610	$839,096	$8,939,596	1.8%	(0.7%) - 4.2%
Major Small & Large Bowel Procedures W CC (330)	69	69	$14,577	$1,329,776	$8,099,202	1.0%	(1.0%) - 3.0%
GI Hemorrhage W CC (378)	103	103	$10,066	$820,623	$7,893,845	1.5%	(0.6%) - 3.7%
Hip & Femur Procedures Except Major Joint W CC (481)	53	53	$5,353	$872,266	$7,580,640	0.6%	(0.3%) - 1.5%
Infectious & Parasitic Diseases W OR Procedure W CC (854)	35	35	$11,689	$569,087	$6,375,031	1.8%	(0.8%) - 4.4%
Simple Pneumonia & Pleurisy W CC (194)	78	78	$10,082	$501,781	$6,134,384	2.0%	(0.0%) - 3.9%
GI Hemorrhage W MCC (377)	46	46	$4,039	$623,245	$5,689,054	0.7%	(0.7%) - 2.2%
Syncope & Collapse (312)	66	66	$7,137	$478,637	$5,235,348	1.3%	(1.2%) - 3.7%
Signs & Symptoms W/O MCC (948)	51	51	$12,058	$294,476	$4,978,742	4.3%	(0.2%) - 8.7%
AMI, Discharged Alive W CC (281)	66	66	$7,870	$475,998	$4,962,999	1.7%	(1.6%) - 4.9%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O MCC (247)	97	97	$6,884	$1,406,608	$4,486,605	0.5%	(0.5%) - 1.5%
Kidney & Urinary Tract Infections W/O MCC (690)	129	129	$6,492	$826,290	$4,065,223	0.8%	(0.3%) - 1.9%
All Other Codes	8,914	8,914	$323,227	$233,918,848	$52,060,857	0.1%	0.1% - 0.1%
Total (Part A Hospital IPPS)	**13,500**	**13,500**	**$928,922**	**$301,176,444**	**$346,587,358**	**0.3%**	**0.2% - 0.4%**

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	**50,006**	**83,039**	**$973,252**	**$379,843,391**	**$701,977,253**	**0.2%**	**0.1% - 0.2%**

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.

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 RY2024, 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.[21] Strata are defined by service categorization and sampling month. 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’

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.

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

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)	471	208	44.2%
All Codes With Less Than 30 Claims	12,523	2,074	16.6%
Complete cbc w/auto diff wbc (85025)	414	55	13.3%
Critical care first hour (99291)	388	102	26.3%
Infec agen detec ampli probe (U0005)	382	184	48.2%
Office o/p est mod 30-39 min (99214)	786	96	12.2%
Routine venipuncture (36415)	529	51	9.6%
Sbsq hosp ip/obs high 50 (99233)	694	304	43.8%
Sbsq hosp ip/obs moderate 35 (99232)	396	37	9.3%
Unlisted molecular pathology (81479)	953	173	18.2%
Other	19,463	3,771	19.4%
TOS Code			
All Codes With Less Than 30 Claims	2,557	315	12.3%
Hospital visit - subsequent	1,357	386	28.4%
Lab tests - other (non-Medicare fee schedule)	10,282	2,624	25.5%
Minor procedures - other (Medicare fee schedule)	2,339	324	13.9%
Office visits - established	1,725	278	16.1%
Other drugs	1,833	229	12.5%
Other tests - other	709	127	17.9%
Specialist - other	1,323	355	26.8%
Specialist - psychiatry	805	110	13.7%
Undefined codes	1,091	26	2.4%
Other	12,978	2,281	17.6%
Resolution Type[22]			
Automated	9,301	630	6.8%
Complex	29	3	10.3%
None	27,642	6,418	23.2%
Routine	27	4	14.8%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,874	360	19.2%
Disorders of choroid and retina	982	21	2.1%
Hypertensive diseases	1,033	260	25.2%
Other diseases of the urinary system	1,202	326	27.1%
Other dorsopathies	883	167	18.9%
Other forms of heart disease	1,281	276	21.5%
Persons encountering health services for examinations	1,563	278	17.8%
Persons with potential health hazards related to communicable diseases	1,697	444	26.2%

[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	1,760	431	24.5%
Symptoms and signs involving the circulatory and respiratory systems	901	184	20.4%
Other	23,823	4,308	18.1%

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	5,993	996	16.6%
Collagen dressing <=16 sq in (A6021)	335	105	31.3%
Home vent non-invasive inter (E0466)	492	57	11.6%
Nebulizer with compression (E0570)	368	29	7.9%
Oxygen concentrator (E1390)	430	45	10.5%
Parenteral administration ki (B4224)	421	94	22.3%
Parenteral supply kit premix (B4220)	377	88	23.3%
Pos airway pressure filter (A7038)	524	94	17.9%
Replacement facemask interfa (A7031)	406	72	17.7%
Ther cgm supply allowance (K0553)	717	480	66.9%
Other	13,938	3,053	21.9%
TOS Code			
CPAP	2,951	421	14.3%
Glucose Monitor	1,508	760	50.4%
Immunosuppressive Drugs	921	169	18.3%
Infusion Pumps & Related Drugs	1,117	188	16.8%
Lower Limb Orthoses	960	305	31.8%
Lower Limb Prostheses	2,465	137	5.6%
Nebulizers & Related Drugs	1,491	176	11.8%
Oxygen Supplies/Equipment	896	102	11.4%
Parenteral Nutrition	1,517	354	23.3%
Surgical Dressings	1,815	689	38.0%
Other	8,360	1,812	21.7%
Resolution Type[23]			
Automated	4,371	258	5.9%
Complex	56	10	17.9%
None	19,497	4,812	24.7%
Routine	77	33	42.9%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,673	312	18.6%
Chronic lower respiratory diseases	2,021	230	11.4%
Diabetes mellitus	2,357	1,025	43.5%
Episodic and paroxysmal disorders	3,077	422	13.7%
In situ neoplasms	585	56	9.6%
Injuries to the knee and lower leg	660	239	36.2%
Osteoarthritis	737	285	38.7%
Other disorders of the skin and subcutaneous tissue	1,002	293	29.2%

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

Variable	Lines Reviewed	Lines Containing Errors	Percent of Lines Containing Errors
Persons with potential health hazards related to family and personal history and certain conditions	4,332	581	13.4%
Symptoms and signs involving the genitourinary system	700	238	34.0%
Other	6,857	1,432	20.9%

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	636	18	2.8%
Clinical Rural Health	124	4	3.2%
CAH	283	56	19.8%
Home Health	1,250	158	12.6%
Hospital Inpatient (Part A)	1,016	219	21.6%
Hospital Other Part B	102	23	22.5%
Hospital Outpatient	2,247	210	9.3%
Hospital based hospice	152	24	15.8%
Nonhospital based hospice	745	87	11.7%
SNF Inpatient	1,577	564	35.8%
Other	374	78	20.9%
TOS Code			
Clinic ESRD	636	18	2.8%
Clinical Rural Health	124	4	3.2%
CAH	283	56	19.8%
Home Health	1,250	158	12.6%
Hospital Inpatient (Part A)	1,016	219	21.6%
Hospital Other Part B	102	23	22.5%
Hospital Outpatient	2,247	210	9.3%
Hospital based hospice	152	24	15.8%
Nonhospital based hospice	745	87	11.7%
SNF Inpatient	1,577	564	35.8%
Other	374	78	20.9%
Diagnosis Code			
Acute kidney failure and chronic kidney disease	719	35	4.9%
All Codes With Less Than 30 Claims	428	69	16.1%
Cerebrovascular diseases	410	95	23.2%
Chronic lower respiratory diseases	212	34	16.0%
Diabetes mellitus	274	58	21.2%
Encounters for other specific health care	459	96	20.9%
Hypertensive diseases	404	58	14.4%
No Matching Diagnosis Code Label	217	69	31.8%
Other degenerative diseases of the nervous system	252	38	15.1%
Other forms of heart disease	307	52	16.9%
Other	4,824	837	17.4%

Table N4: Claims in Error: Part A Hospital IPPS

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
DRG Label			
Aftercare, Musculoskeletal System & Connective Tissue W CC (560)	174	41	23.6%
All Codes With Less Than 30 Claims	2,923	415	14.2%
Degenerative Nervous System Disorders W/O MCC (057)	172	49	28.5%
Endovascular Cardiac Valve Replacement & Supplement Procedures W MCC (266)	284	54	19.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures W/O MCC (267)	457	79	17.3%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity W/O MCC (470)	585	286	48.9%
Percutaneous Intracardiac Procedures W/O MCC (274)	459	194	42.3%
Psychoses (885)	344	45	13.1%
Respiratory Infections & Inflammations W MCC (177)	366	46	12.6%
Septicemia Or Severe Sepsis W/O MV >96 Hours W/O MCC (872)	153	23	15.0%
Other	7,583	1,223	16.1%
TOS Code			
Aftercare, Musculoskeletal System & Connective Tissue (559, 560, 561)	355	98	27.6%
All Codes With Less Than 30 Claims	1,832	307	16.8%
Combined Anterior/Posterior Spinal Fusion (453, 454, 455)	223	41	18.4%
Degenerative Nervous System Disorders (056, 057)	230	62	27.0%
Endovascular Cardiac Valve Replacement & Supplement Procedures (266, 267)	741	133	17.9%
Major Hip And Knee Joint Replacement Or Reattachment Of Lower Extremity (469, 470)	671	307	45.8%
Percutaneous Intracardiac Procedures (273, 274)	506	200	39.5%
Psychoses (885)	344	45	13.1%
Respiratory Infections & Inflammations (177, 178, 179)	426	57	13.4%
Septicemia Or Severe Sepsis W/O MV >96 Hours (871, 872)	266	33	12.4%
Other	7,906	1,172	14.8%
Diagnosis Code			
All Codes With Less Than 30 Claims	458	74	16.2%
Cerebrovascular diseases	303	35	11.6%
Complications of surgical and medical care, not elsewhere classified	960	157	16.4%
Hypertensive diseases	386	71	18.4%
Ischemic heart diseases	502	61	12.2%
No Matching Diagnosis Code Label	311	47	15.1%
Osteoarthritis	753	338	44.9%
Other bacterial diseases	460	44	9.6%
Other forms of heart disease	1,768	401	22.7%

Variable	Claims Reviewed	Claims Containing Errors	Percent of Claims Containing Errors
Spondylopathies	505	120	23.8%
Other	7,094	1,107	15.6%

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

Claim Type	Included	Excluded	Total	Percent Included
Part B	17,000	514	17,514	97.1%
DMEPOS	11,000	369	11,369	96.8%
Part A Including Hospital IPPS[25]	22,006	13,813	35,819	61.4%

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

Appendix O: List of Acronyms

Acronym	Definition
AFR	Agency Financial Report
AICD	Automatic Implantable Cardioverter Defibrillator
AMI	Acute Myocardial Infarction
ANSI	American National Standards Institute
ASC	Accredited Standards Committee
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 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
CPAP	Continuous Positive Airway Pressure
DMEPOS	Durable Medical Equipment, Prosthetics, Orthotics & Supplies
DRG	Diagnosis Related Group
ECMO	Extracorporeal Membrane Oxygenation
E&M	Evaluation and Management
ESRD	End-Stage Renal Disease
FFS	Fee-For-Service
FQHC	Federally Qualified Health Center
FY	Fiscal Year
GI	Gastrointestinal
HCPCS	Healthcare Common Procedure Coding System
HHA	Home Health Agency
HHS	Department of Human and Health Services
HIPPS	Health Insurance Prospective Payment System
IDTF	Independent Diagnostic Testing Facility
IPPS	Inpatient Prospective Payment System
LSO	Lumbar-Sacral Orthosis
MAC	Medicare Administrative Contractor
MCC	Major Complication or Comorbidity
MS-DRG	Medicare Severity Diagnosis Related Group
MV	Mechanical Ventilation
NCD	National Coverage Determination
OMB	Office of Management and Budget
OPT	Outpatient Physical Therapy
OPPS	Outpatient Prospective Payment System

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