U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

2018 Medicare Fee-for-Service Supplemental Improper Payment Data

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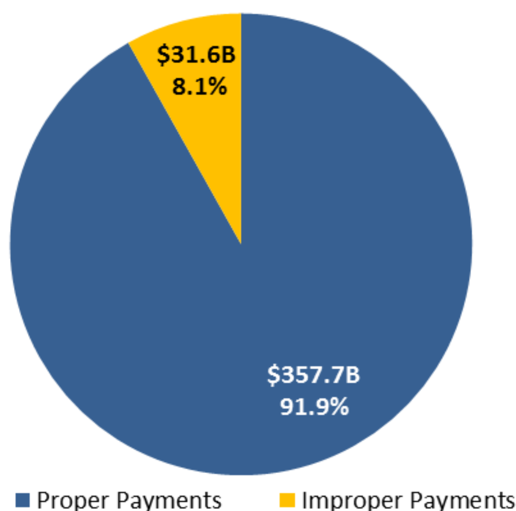
SUMMARY OF HIGH LEVEL FINDINGS

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

91.9 Percent Accuracy Rate and 8.1 Percent Improper Payment Rate[1, 2, 3]

Figure 1: Payment Accuracy



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

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

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

Common Causes of Improper Payments

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

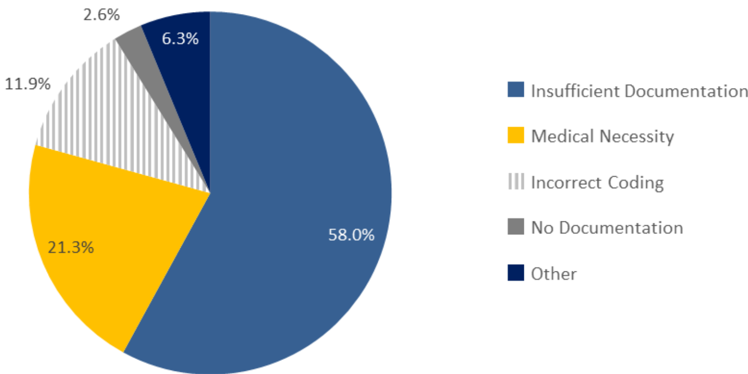
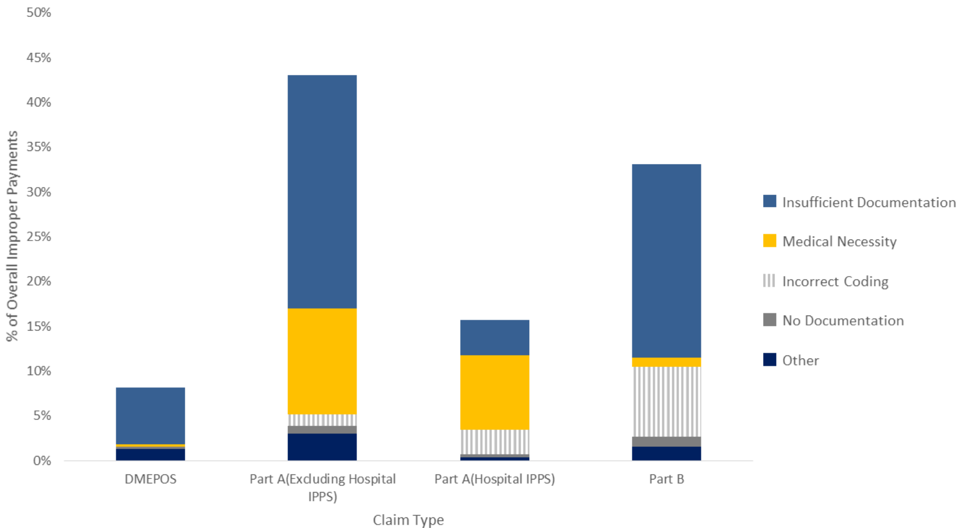
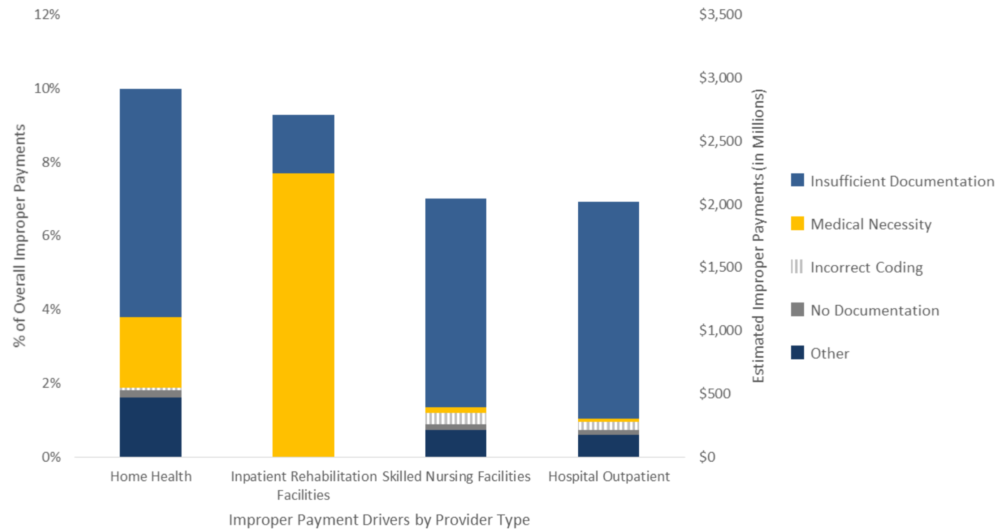


Figure 3: Improper Payment Rate Error Categories by Percentage of 2018 National Improper Payments by Claim Type (Adjusted for Impact of A/B Rebilling)[4]



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

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



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

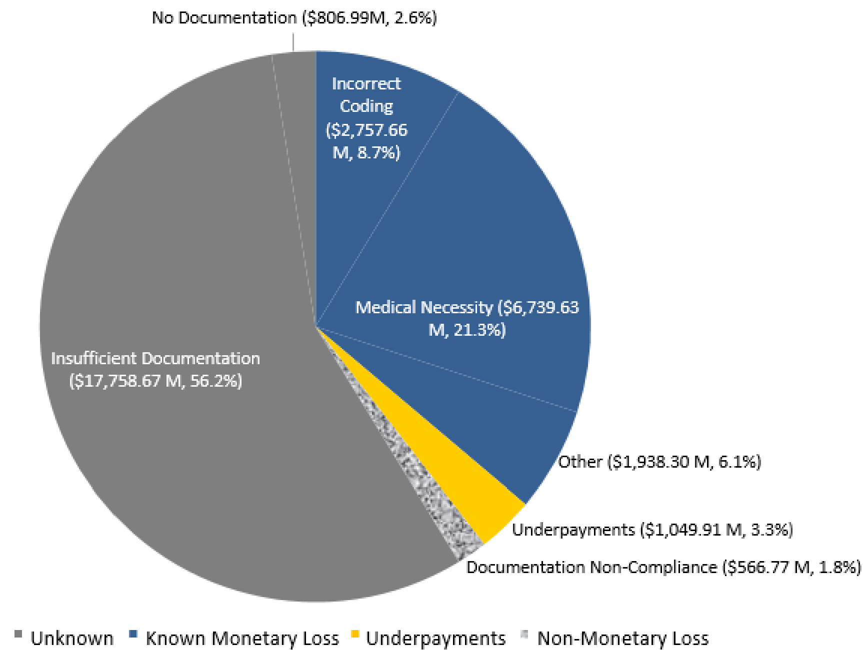
Inpatient rehabilitation facilities (IRF) is defined as any service with a provider type of either inpatient rehabilitation hospitals or inpatient rehabilitation unit. The projected improper payment amount for IRF during the 2018 report period was $2.9 billion, resulting in an improper payment rate of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

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

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

Monetary Loss Findings[5]

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



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

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

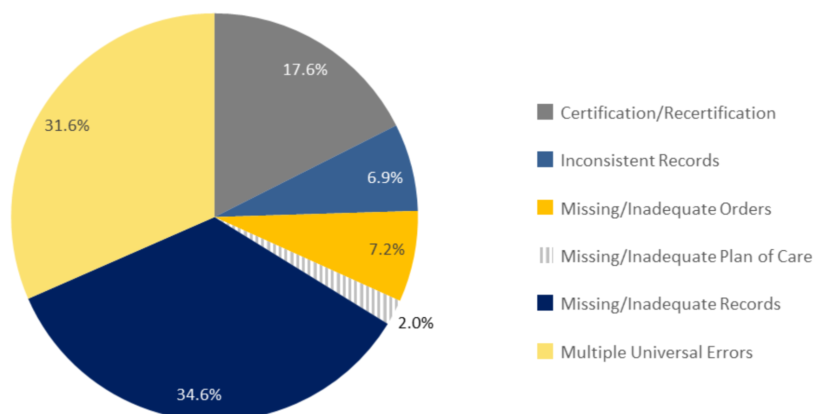
Detailed Information on Insufficient Documentation Errors by Claim Type

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

The universal error names and definitions are:

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

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



[7] Missing is defined as the provider fails to submit a required document, in its entirety. Inadequate is defined as the provider has submitted the documentation; however, a required element is not complete. CMS is exploring new and innovative approaches to providing additional data on missing and inadequate insufficient documentation errors in future reporting.
[8] A valid provider's order is defined as meeting the required elements for the order. A valid provider's plan of care is defined as meeting the required elements for plan of care.

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

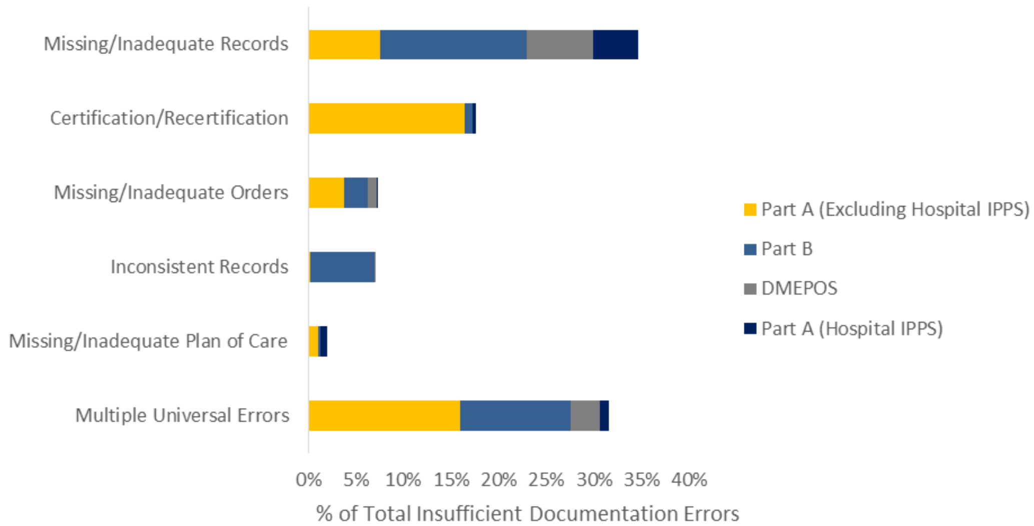
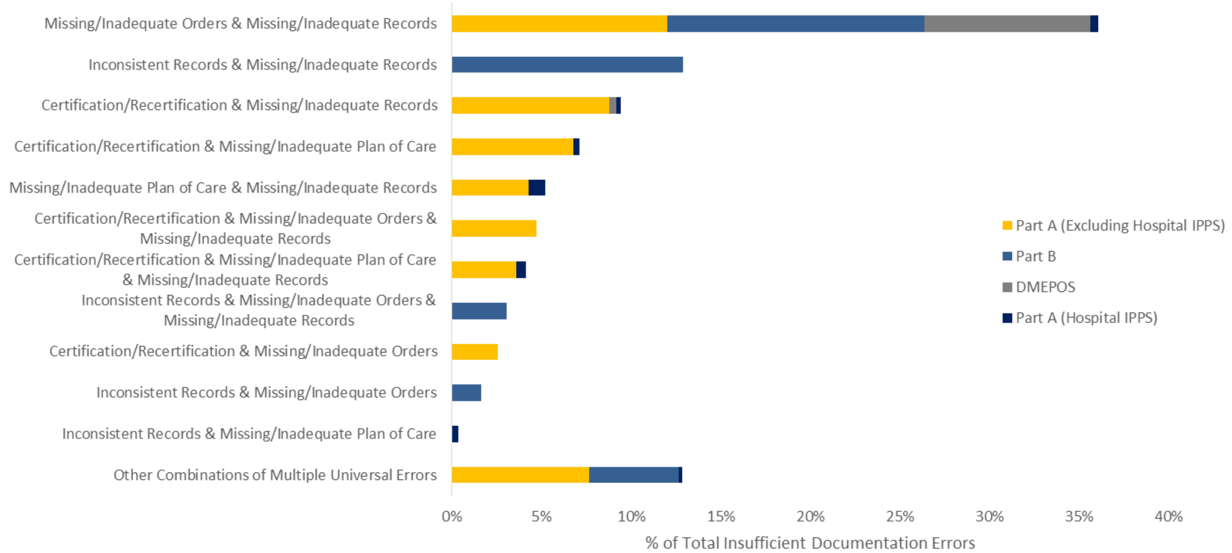


Figure 8: Claim Type Categories by Percentage of Insufficient Documentation Improper Payments by Multiple Universal Errors[9]



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

Part A (Excluding Hospital IPPS)

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

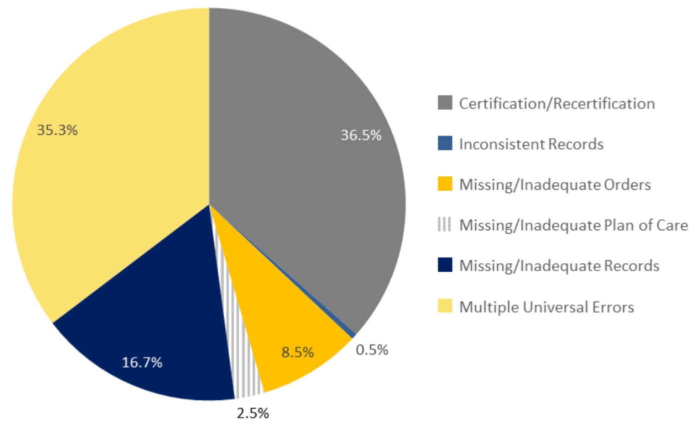


Figure 10: Multiple Universal Errors as a Percentage of Part A (Excluding Hospital IPPS) Improper Payments Due to Insufficient Documentation

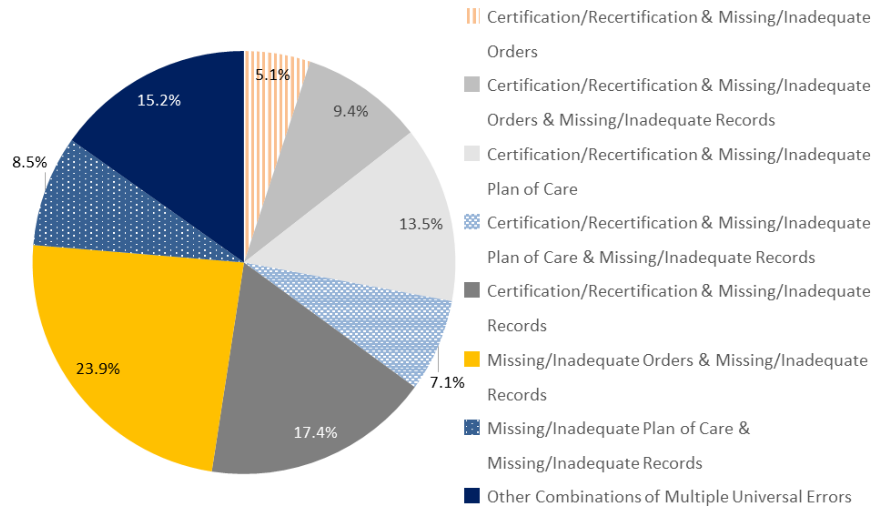


Table 1: Top Root Causes of Insufficient Documentation Errors in Part A (Excluding Hospital IPPS)

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

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

Part B

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

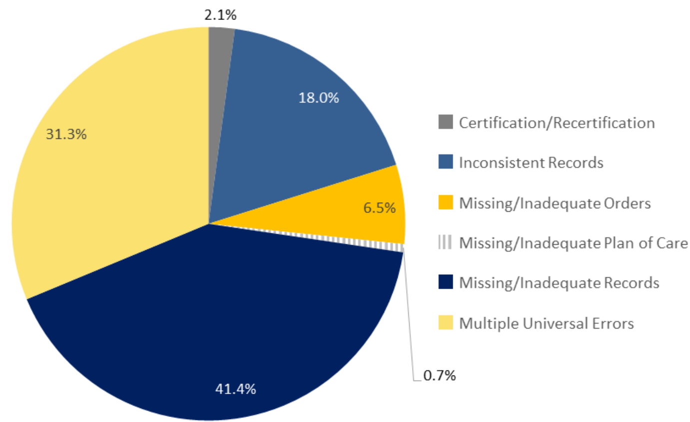


Figure 12: Multiple Universal Errors as a Percentage of Part B Improper Payments Due to Insufficient Documentation

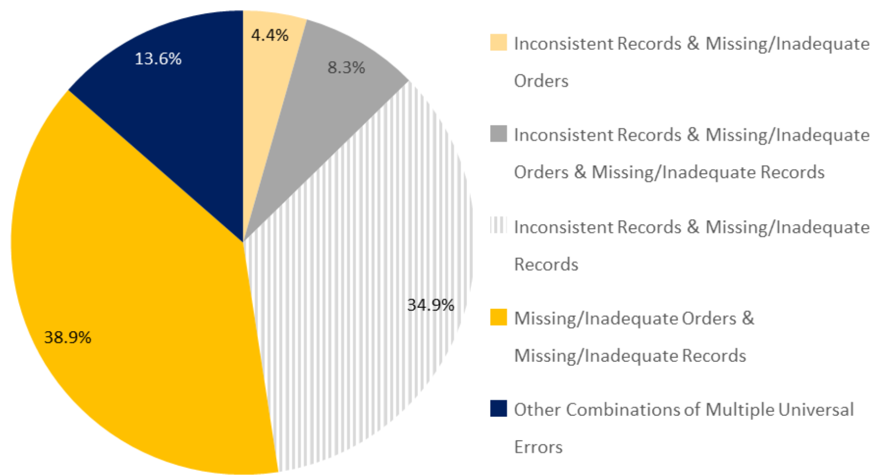


Table 2: Top Root Causes of Insufficient Documentation Errors in Part B

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

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

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

Figure 13: Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation[12]

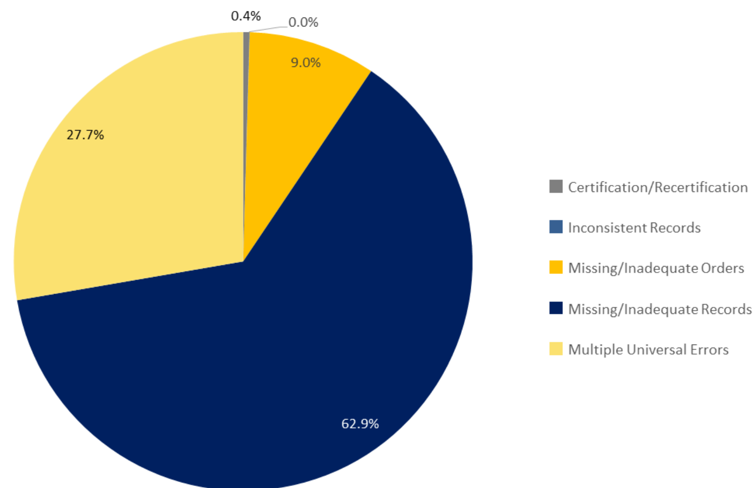
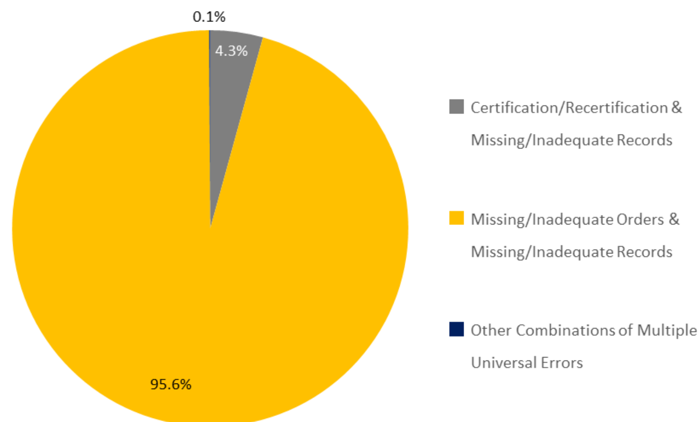


Figure 14: Multiple Universal Errors as a Percentage of DMEPOS Improper Payments Due to Insufficient Documentation



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

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

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

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

SUPPLEMENTAL STATISTICAL REPORTING

Appendix A: Summary of Projected Improper Payments Adjusted for A/B Rebill[14]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[20] For purposes of this report, correct payments are considered total Medicare FFS payments minus payments considered an improper payment as identified through CERT. Please note that instances of fraud or other problems not discerned during the CERT review could still be present.
[21] FY 1996-2003 improper payments were calculated as Overpayments - Underpayments
[22] FY 2004-2018 improper payments were calculated as Overpayments + absolute value of Underpayments

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table F5: Top 20 Types of Services with Downcoding[23] Errors

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

[23] Downcoding refers to billing a lower level service or a service with a lower payment than is supported by the medical record documentation.
[24] Downcoding errors represent less than one one-tenth of a percent of Hospital Outpatient expenditures.

Table F6: Top 20 Types of Services with Other Errors

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

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

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

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

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

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

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

Table G2: Improper Payment Rates by Service Type: DMEPOS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table H5: Improper Payment Rates for CPAP by Referring Provider

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

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

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

Table I1: Improper Payment Rates and Amounts by Provider Type: Part B[25]

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

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

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

Table I2: Improper Payment Rates and Amounts by Provider Type[26]: DMEPOS[27]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix K: Coding Information

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

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

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

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

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

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

Table K3: Type of Services with Upcoding[28] Errors: Part B

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

Table K4: Type of Services with Upcoding Errors: DMEPOS

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

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

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

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

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

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

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

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

Appendix L: Overpayments

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

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

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

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

DMEPOS (HCPCS)	Claims Reviewed	Lines Reviewed	Sample Dollars Overpaid	Total Sample Dollars Paid	Projected Dollars Overpaid	Overpayment Rate	95% Confidence Interval
All Codes With Less Than 30 Claims	2,322	3,613	$300,080	$1,140,279	$679,700,229	38.7%	33.1% - 44.3%
Oxygen concentrator (E1390)	799	817	$20,946	$54,223	$209,267,243	38.7%	34.9% - 42.9%
Home vent non-invasive inter (E0466)	335	340	$87,364	$312,188	$72,169,331	27.9%	22.8% - 33.0%
Blood glucose/reagent strips (A4253)	229	240	$2,086	$4,743	$71,457,468	45.3%	37.6% - 53.0%
LSO sc r ant/pos pnl pre ots (L0650)	108	108	$40,108	$101,118	$66,662,803	36.4%	26.1% - 46.7%
Ko adj jnt pos r sup pre ots (L1833)	137	152	$60,260	$80,689	$62,499,498	74.8%	66.1% - 83.5%
Cont airway pressure device (E0601)	227	240	$3,202	$7,360	$46,290,389	41.6%	34.6% - 48.7%
Diab shoe for density insert (A5500)	104	119	$9,021	$12,823	$40,989,454	71.1%	61.8% - 80.4%
Multi den insert custom mold (A5513)	95	107	$13,602	$17,577	$37,339,160	73.2%	60.0% - 86.4%
CPAP full face mask (A7030)	154	156	$4,855	$13,047	$36,905,749	37.3%	29.0% - 45.6%
Portable gaseous 02 (E0431)	399	407	$3,744	$5,852	$36,741,721	64.1%	58.7% - 69.5%
Nasal application device (A7034)	138	138	$3,354	$7,002	$36,733,993	47.2%	38.2% - 56.2%
Ext amb infusn pump insulin (E0784)	49	49	$11,486	$16,293	$31,676,102	71.0%	57.7% - 84.3%
Collagen dressing <=16 sq in (A6021)	66	71	$25,420	$34,385	$30,858,319	72.8%	57.6% - 88.0%
Arformoterol non-comp unit (J7605)	100	101	$7,816	$48,242	$28,107,702	16.4%	8.8% - 24.0%
Mycophenolic acid (J7518)	107	107	$13,501	$45,198	$27,388,509	29.7%	19.5% - 39.9%
Replacement facemask interfa (A7031)	196	200	$4,634	$12,046	$26,326,017	37.9%	29.7% - 46.2%
Replacement nasal cushion (A7032)	146	147	$4,192	$9,943	$26,049,217	46.8%	35.0% - 58.7%
LSO sag r an/pos pnl pre ots (L0648)	54	54	$25,237	$43,709	$25,627,414	57.4%	42.5% - 72.2%
Rad w/o backup non-inv intfc (E0470)	109	114	$5,070	$9,796	$25,366,635	52.6%	42.4% - 62.8%
All Other Codes	7,677	13,328	$1,257,707	$9,997,751	$964,264,049	29.4%	27.9% - 31.3%
Total (DMEPOS)	**10,981**	**20,608**	**$1,903,686**	**$11,974,265**	**$2,582,421,004**	**35.5%**	**33.7% - 37.3%**

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

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

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

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

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

Table L5: Overpayment Rate: All Claim Types

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

Appendix M: Underpayments

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

Table M1: Service-Specific Underpayment Rates: Part B

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

Table M2: Service-Specific Underpayment Rates: DMEPOS

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

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

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

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

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

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

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

Table M5: Underpayment Rate: All Claim Types

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

Appendix N: Statistics and Other Information for the CERT Sample

Summary of Sampling and Estimation Methodology for the CERT Program

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

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

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

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

Generalized ("Hybrid") Ratio Estimator
For CERT estimation, the Medicare universe can be partitioned by different groups. The groups relevant for developing the CERT estimator are defined as follows:

partition = group by which payment information is available (denoted by subscript 'i')
strata = sampling group (denoted by subscript 'k')
domain = area of interest within the universe (denoted by superscript 'd')

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

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

The estimator for a domain, d, is expressed as

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

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.

Table N1: Lines in Error: Part B

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

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

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

Table N2: Lines in Error: DMEPOS

Variable	Lines Reviewed	Lines Containing Errors	Percent of Lines Containing Errors
Service			
All Codes With Less Than 30 Claims	3,613	1,242	34.4%
Disp fee inhal drugs/30 days (Q0513)	614	69	11.2%
Home vent non-invasive inter (E0466)	340	89	26.2%
Lancets per box (A4259)	512	258	50.4%
Maint drug infus cath per wk (A4221)	308	43	14.0%
Oxygen concentrator (E1390)	817	245	30.0%
Portable gaseous 02 (E0431)	407	203	49.9%
Pos airway pressure filter (A7038)	402	159	39.6%
Px sup fee anti-can sub pres (Q0512)	392	87	22.2%
Sup fee antiem,antica,immuno (Q0511)	396	104	26.3%
Other	12,807	4,116	32.1%
TOS Code			
CPAP	2,460	883	35.9%
Glucose Monitor	883	423	47.9%
Immunosuppressive Drugs	1,363	316	23.2%
Infusion Pumps & Related Drugs	1,397	249	17.8%
Lower Limb Orthoses	678	371	54.7%
Lower Limb Prostheses	1,325	170	12.8%
Nebulizers & Related Drugs	2,122	371	17.5%
Ostomy Supplies	788	323	41.0%
Oxygen Supplies/Equipment	1,631	627	38.4%
Parenteral Nutrition	804	110	13.7%
Other	7,157	2,772	38.7%

Variable	Lines Reviewed	Lines Containing Errors	Percent of Lines Containing Errors
Resolution Type[31]			
Automated	3,658	19	0.5%
Complex	107	27	25.2%
None	16,766	6,542	39.0%
Routine	77	27	35.1%
Diagnosis Code			
All Codes With Less Than 30 Claims	1,081	342	31.6%
Chronic lower respiratory diseases	2,606	780	29.9%
Diabetes mellitus	1,500	735	49.0%
Episodic and paroxysmal disorders	2,642	958	36.3%
Osteoarthritis	496	286	57.7%
Other disorders of the skin and subcutaneous tissue	485	274	56.5%
Other forms of heart disease	638	198	31.0%
Persons with potential health hazards related to family and personal history and certain conditions	3,307	868	26.2%
Pulmonary heart disease and diseases of pulmonary circulation	1,033	65	6.3%
Symptoms and signs involving the genitourinary system	450	116	25.8%
Other	6,370	1,993	31.3%

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

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

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

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

Table N4: Claims in Error: Part A Hospital IPPS

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

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

Table N5: "Included In" and "Excluded From" the Sample

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

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

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

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

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

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

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

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

Appendix O: List of Acronyms

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

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