



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Supplementary Appendices for the

Medicare

Fee-for-Service

2013 Improper Payment

Rate Report

Appendix Organization

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Appendix A: List of Acronyms

AICD	Automated Implantable Cardioverter-Defibrillator
AMA	American Medical Association
AMI	Acute Myocardial Infarction
ASC	Ambulatory Surgery Center
BETOS	Berenson-Eggers Type of Service
CAH	Critical Access Hospital
CAT/CT	Computer Tomography
CERT	Comprehensive Error Rate Testing
CMHC	Community Mental Health Center
CMS	Centers for Medicare & Medicaid Services
CORF	Comprehensive Outpatient Rehabilitation Facility
CPAP	Continuous Positive Airway Pressure
CPT	Current Procedural Terminology
CRNA	Certified Registered Nurse Anesthetist
DRG	Diagnosis Related Group
DME	Durable Medical Equipment
E&M	Evaluation and Management
EKG	Electrocardiogram
ESRD	End-Stage Renal Disease
FFS	Fee-for-Service
FI	Fiscal Intermediary
FQHC	Federally Qualified Health Center
FY	Fiscal Year
GI	Gastrointestinal
HCPCS	Healthcare Common Procedure Coding System
HF	Heart Failure
HHA	Home Health Agency
IDTF	Independent Diagnostic Testing Facility
MAC	Medicare Administrative Contractor
MRA	Magnetic Resonance Angiogram
MRI	Magnetic Resonance Imaging
MS-DRG	Medicare Severity Diagnosis Related Group
OIG	Office of the Inspector General
OPPS	Outpatient Prospective Payment System
ORF	Outpatient Rehabilitation Facility
PPS	Prospective Payment System
QIO	Quality Improvement Organization

RAP	Request for Anticipated Payment
RHC	Rural Health Clinic
RTP	Return to Provider
SNF	Skilled Nursing Facility
TENS	Transcutaneous Electrical Nerve Stimulation
TOS	Type of Service

Appendix B: 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 this table are based on a minimum of 30 lines in the sample. Some columns and/or rows may not sum correctly due to rounding.

Table B1: Top 20 Service Types with Highest Improper Payments: Part B

Service Type Billed to Carriers (BETOS codes)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Type of Error				
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
All Other Codes	\$1,998,992,350	6.3%	5.1% - 7.4%	5.2%	81.3%	7.9%	4.7%	0.9%
Hospital visit - subsequent	\$1,000,904,548	18.2%	16.2% - 20.3%	4.6%	57.6%	0.0%	37.2%	0.5%
Office visits - established	\$964,723,508	7.1%	6.1% - 8.2%	3.1%	48.4%	0.4%	48.1%	0.0%
Hospital visit - initial	\$798,577,177	28.3%	26.0% - 30.6%	2.0%	21.7%	0.0%	75.9%	0.4%
Lab tests - other (non-Medicare fee schedule)	\$719,696,845	26.1%	20.2% - 32.0%	0.4%	98.4%	1.1%	0.0%	0.0%
Minor procedures - other (Medicare fee schedule)	\$690,793,236	18.2%	14.7% - 21.7%	1.0%	88.1%	5.5%	4.0%	1.5%
Office visits - new	\$492,745,979	18.9%	16.2% - 21.5%	0.0%	15.1%	0.6%	84.3%	0.0%
Other drugs	\$385,192,937	5.6%	2.6% - 8.6%	1.4%	95.4%	0.1%	2.1%	1.1%
Ambulance	\$313,596,261	6.7%	4.4% - 9.1%	0.1%	61.8%	31.7%	6.4%	0.0%
Chiropractic	\$273,488,430	51.7%	46.1% - 57.4%	1.5%	92.5%	4.5%	0.6%	0.8%
Nursing home visit	\$247,766,792	13.9%	11.5% - 16.2%	5.4%	39.1%	0.0%	52.7%	2.8%
Emergency room visit	\$238,543,506	11.6%	9.2% - 14.0%	0.0%	18.2%	0.0%	81.8%	0.0%
Other tests - other	\$200,247,421	9.7%	4.3% - 15.1%	0.1%	92.7%	6.4%	0.0%	0.7%
Hospital visit - critical care	\$199,824,964	22.9%	17.8% - 28.0%	3.2%	49.2%	0.0%	47.6%	0.0%
Specialist - psychiatry	\$189,200,846	21.5%	15.7% - 27.2%	2.1%	95.3%	0.0%	2.2%	0.4%
Advanced imaging - CAT/CT/CTA: other	\$165,165,033	15.3%	7.9% - 22.7%	0.0%	99.5%	0.4%	0.0%	0.0%
Major procedure, cardiovascular-Other	\$160,285,190	9.1%	(6.3%) - 24.5%	95.5%	4.2%	0.0%	0.0%	0.2%
Lab tests - other (Medicare fee schedule)	\$151,690,810	6.9%	2.7% - 11.0%	9.3%	88.5%	1.9%	0.3%	0.0%
Minor procedures - musculoskeletal	\$108,336,462	10.4%	5.1% - 15.7%	0.0%	77.8%	0.7%	0.3%	21.2%
Standard imaging - nuclear medicine	\$101,501,458	10.1%	5.8% - 14.3%	0.0%	98.2%	1.8%	0.0%	0.0%
Standard imaging - musculoskeletal	\$89,816,753	15.0%	11.0% - 18.9%	0.0%	87.3%	2.6%	3.3%	6.7%
All Type of Services (Incl. Codes Not Listed)	\$9,491,090,506	10.5%	9.5% - 11.5%	4.3%	65.5%	3.6%	25.7%	0.9%

Table B2: Top 20 Service Types with Highest Improper Payments: DME

Service Type Billed to DME	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Type of Error				
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Oxygen Supplies/Equipment	\$1,166,165,190	75.2%	72.6% - 77.7%	0.4%	97.3%	1.2%	0.0%	1.1%
Glucose Monitor	\$930,847,134	74.7%	71.8% - 77.5%	0.3%	90.0%	8.9%	0.3%	0.4%
All Other Codes	\$511,091,781	48.2%	44.2% - 52.2%	1.1%	93.4%	2.2%	0.1%	3.2%
CPAP	\$369,634,140	56.1%	49.0% - 63.2%	0.4%	98.1%	1.4%	0.0%	0.1%
Wheelchairs Motorized	\$329,070,885	81.8%	79.3% - 84.2%	0.8%	96.2%	2.8%	0.0%	0.1%
Nebulizers & Related Drugs	\$292,958,188	36.2%	22.0% - 50.3%	0.0%	97.6%	1.1%	0.0%	1.3%
Wheelchairs Options/Accessories	\$216,163,799	70.2%	59.3% - 81.1%	0.3%	95.8%	1.7%	0.0%	2.2%
Lower Limb Prostheses	\$208,427,384	48.4%	39.8% - 57.1%	0.1%	95.1%	4.3%	0.0%	0.5%
Enteral Nutrition	\$206,508,324	55.1%	45.4% - 64.9%	1.8%	90.3%	3.9%	0.0%	4.0%
Wheelchairs Manual	\$186,408,395	90.7%	86.5% - 94.8%	0.9%	97.4%	0.4%	0.0%	1.3%
Immunosuppressive Drugs	\$180,813,864	46.3%	34.5% - 58.0%	0.0%	98.4%	0.0%	0.0%	1.6%
Hospital Beds/Accessories	\$159,278,037	84.3%	78.7% - 89.9%	1.2%	95.8%	0.5%	0.8%	1.7%
Diabetic Shoes	\$156,108,741	76.8%	67.1% - 86.5%	0.0%	97.9%	2.0%	0.0%	0.1%
Infusion Pumps & Related Drugs	\$144,358,581	28.8%	7.7% - 49.9%	0.6%	98.9%	0.4%	0.1%	0.0%
All Policy Groups with Less than 30 Claims	\$117,453,205	28.7%	10.9% - 46.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Lower Limb Orthoses	\$110,817,724	43.9%	25.8% - 61.9%	0.0%	68.4%	4.9%	3.2%	23.5%
LSO	\$90,852,815	52.1%	42.6% - 61.5%	5.0%	91.2%	0.0%	0.0%	3.8%
Ostomy Supplies	\$80,612,076	43.0%	31.2% - 54.7%	0.1%	99.9%	0.0%	0.0%	0.0%
Respiratory Assist Device	\$75,047,163	67.4%	57.9% - 76.9%	0.0%	95.3%	4.2%	0.0%	0.5%
Surgical Dressings	\$72,961,199	55.5%	41.8% - 69.1%	0.0%	98.0%	2.0%	0.0%	0.0%
Parenteral Nutrition	\$60,804,432	44.7%	35.2% - 54.2%	0.0%	99.9%	0.1%	0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$5,666,383,056	58.2%	54.9% - 61.5%	0.5%	94.9%	2.9%	0.2%	1.6%

Table B3: Top 20 Service Types with Highest Improper Payments: Part A Excluding Inpatient Hospital PPS

Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Type of Error				
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Home Health	\$3,091,382,940	17.3%	14.9% - 19.8%	1.7%	81.4%	15.8%	1.1%	0.0%
SNF Inpatient	\$2,481,992,495	7.7%	5.5% - 9.9%	0.0%	74.9%	4.2%	14.2%	6.7%
Hospital Outpatient	\$2,443,555,475	5.3%	4.0% - 6.6%	1.8%	84.6%	3.2%	6.9%	3.5%
Nonhospital based hospice	\$1,027,433,960	8.3%	5.1% - 11.5%	0.0%	63.3%	35.7%	1.0%	0.0%
Hospital Inpatient (Part A)	\$934,624,319	11.0%	5.9% - 16.1%	0.0%	61.0%	39.0%	0.0%	0.0%
Clinic ESRD	\$813,485,526	7.8%	5.3% - 10.3%	0.1%	97.1%	0.0%	1.9%	0.9%
Critical Access Hospital	\$215,880,132	4.9%	3.0% - 6.8%	0.0%	95.5%	0.0%	4.5%	0.0%
Hospital Other Part B	\$130,796,056	21.4%	13.6% - 29.1%	0.3%	96.6%	0.0%	3.1%	0.0%
SNF Inpatient Part B	\$85,354,486	3.7%	1.2% - 6.2%	0.0%	96.0%	0.0%	4.0%	0.0%
Clinical Rural Health	\$60,707,386	6.3%	1.9% - 10.8%	0.0%	100.0%	0.0%	0.0%	0.0%
Hospital Inpatient Part B	\$58,277,067	10.7%	6.9% - 14.4%	0.0%	99.2%	0.0%	0.7%	0.1%
Clinic OPT	\$28,474,746	5.9%	1.6% - 10.3%	44.6%	53.5%	0.0%	1.9%	0.0%
Hospital based hospice	\$27,554,029	2.5%	(0.5%) - 5.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Federally Qualified Health Centers (Effective April 1, 2010)	\$13,566,412	2.0%	0.3% - 3.6%	0.0%	97.0%	0.0%	0.0%	3.0%
SNF Outpatient	\$12,437,025	4.9%	2.6% - 7.1%	1.7%	98.3%	0.0%	0.0%	0.0%
All Codes With Less Than 30 Claims	\$1,633,651	0.1%	(0.1%) - 0.4%	0.0%	83.4%	0.0%	16.6%	0.0%
Clinic CORF	\$1,382,956	7.8%	0.3% - 15.4%	0.0%	80.9%	19.1%	0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$11,428,538,662	8.2%	7.2% - 9.1%	1.0%	79.2%	12.3%	5.2%	2.3%

Table B4: Top 20 Service Types with Highest Improper Payments: Part A Inpatient Hospital PPS

Service Type Billed to Part A Inpatient Hospital PPS (MS-DRG Groups)	Projected Improper Payments	Improper Payment Rate	95% Confidence Interval	Type of Error				
				No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
All Other Codes	\$6,242,478,061	8.2%	7.1% - 9.3%	0.0%	5.5%	70.4%	23.2%	0.8%
Psychoses (885)	\$511,645,568	14.4%	7.5% - 21.2%	0.0%	79.2%	19.4%	1.3%	0.0%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	\$416,800,119	35.2%	33.0% - 37.4%	0.0%	0.8%	84.8%	14.5%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	\$381,783,962	28.3%	20.8% - 35.8%	0.0%	0.0%	95.8%	2.4%	1.8%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	\$344,376,975	19.1%	14.3% - 24.0%	0.0%	5.1%	90.3%	4.6%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	\$328,673,168	5.8%	4.4% - 7.1%	0.0%	55.6%	37.0%	3.7%	3.7%
Renal Failure (682 , 683 , 684)	\$327,676,922	13.1%	8.4% - 17.8%	0.0%	0.0%	80.5%	19.5%	0.0%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	\$285,475,294	40.0%	36.1% - 43.9%	0.0%	5.2%	93.0%	1.5%	0.3%
Heart Failure & Shock (291 , 292 , 293)	\$277,804,435	8.3%	4.9% - 11.8%	0.0%	2.8%	73.4%	12.0%	11.8%
Chest Pain (313)	\$251,352,883	61.2%	49.5% - 72.9%	0.0%	0.0%	99.1%	0.9%	0.0%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	\$249,921,946	10.2%	5.5% - 14.9%	0.0%	5.4%	82.2%	12.4%	0.0%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	\$238,369,791	4.9%	3.4% - 6.3%	0.0%	0.0%	51.0%	49.0%	0.0%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	\$233,583,450	19.1%	12.0% - 26.2%	0.0%	5.7%	82.7%	11.6%	0.0%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	\$232,874,991	17.1%	13.0% - 21.2%	0.0%	0.0%	95.6%	4.4%	0.0%
Medical Back Problems (551 , 552)	\$199,779,765	43.4%	35.8% - 51.1%	0.0%	0.0%	95.8%	4.2%	0.0%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes (640 , 641)	\$198,538,133	17.4%	11.9% - 22.9%	0.0%	14.7%	76.6%	6.0%	2.7%
Kidney & Urinary Tract Infections (689 , 690)	\$195,024,628	12.1%	6.0% - 18.1%	0.0%	10.4%	64.3%	25.3%	0.0%
G.I. Hemorrhage (377 , 378 , 379)	\$188,831,199	8.8%	4.9% - 12.7%	0.0%	0.0%	79.6%	20.4%	0.0%
Other Vascular Procedures (252 , 253 , 254)	\$181,995,430	10.5%	7.6% - 13.4%	0.0%	3.4%	91.9%	4.5%	0.3%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	\$179,773,165	6.2%	3.2% - 9.2%	0.0%	0.0%	47.7%	52.3%	0.0%
Stomach, Esophageal & Duodenal Proc (326 , 327 , 328)	\$175,179,894	28.3%	27.0% - 29.7%	0.0%	2.5%	12.7%	84.9%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$11,641,939,780	9.9%	9.0% - 10.8%	0.0%	9.1%	71.0%	18.9%	0.9%

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

Appendix C tables are sorted in descending order by improper payment rate. Some columns and/or rows may not sum correctly due to rounding.

Table C1: Top 20 Service Type Improper Payment Rates: Part B

Service Type Billed to Part B (BETOS codes)	Improper Payment Rate	95% Confidence Interval	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Chiropractic	51.7%	46.1% - 57.4%	1.5%	92.5%	4.5%	0.6%	0.8%
Hospital visit - initial	28.3%	26.0% - 30.6%	2.0%	21.7%	0.0%	75.9%	0.4%
Lab tests - other (non-Medicare fee schedule)	26.1%	20.2% - 32.0%	0.4%	98.4%	1.1%	0.0%	0.0%
Hospital visit - critical care	22.9%	17.8% - 28.0%	3.2%	49.2%	0.0%	47.6%	0.0%
Specialist - psychiatry	21.5%	15.7% - 27.2%	2.1%	95.3%	0.0%	2.2%	0.4%
Office visits - new	18.9%	16.2% - 21.5%	0.0%	15.1%	0.6%	84.3%	0.0%
Minor procedures - other (Medicare fee schedule)	18.2%	14.7% - 21.7%	1.0%	88.1%	5.5%	4.0%	1.5%
Hospital visit - subsequent	18.2%	16.2% - 20.3%	4.6%	57.6%	0.0%	37.2%	0.5%
Advanced imaging - CAT/CT/CTA: other	15.3%	7.9% - 22.7%	0.0%	99.5%	0.4%	0.0%	0.0%
Standard imaging - musculoskeletal	15.0%	11.0% - 18.9%	0.0%	87.3%	2.6%	3.3%	6.7%
Nursing home visit	13.9%	11.5% - 16.2%	5.4%	39.1%	0.0%	52.7%	2.8%
Emergency room visit	11.6%	9.2% - 14.0%	0.0%	18.2%	0.0%	81.8%	0.0%
Minor procedures - musculoskeletal	10.4%	5.1% - 15.7%	0.0%	77.8%	0.7%	0.3%	21.2%
Standard imaging - nuclear medicine	10.1%	5.8% - 14.3%	0.0%	98.2%	1.8%	0.0%	0.0%
Other tests - other	9.7%	4.3% - 15.1%	0.1%	92.7%	6.4%	0.0%	0.7%
Major procedure, cardiovascular-Other	9.1%	(6.3%) - 24.5%	95.5%	4.2%	0.0%	0.0%	0.2%
Office visits - established	7.1%	6.1% - 8.2%	3.1%	48.4%	0.4%	48.1%	0.0%
Lab tests - other (Medicare fee schedule)	6.9%	2.7% - 11.0%	9.3%	88.5%	1.9%	0.3%	0.0%
Ambulance	6.7%	4.4% - 9.1%	0.1%	61.8%	31.7%	6.4%	0.0%
All Other Codes	6.3%	5.1% - 7.4%	5.2%	81.3%	7.9%	4.7%	0.9%
Other drugs	5.6%	2.6% - 8.6%	1.4%	95.4%	0.1%	2.1%	1.1%
All Types of Services	10.5%	9.5% - 11.5%	4.3%	65.5%	3.6%	25.7%	0.9%

Table C2: Top 20 Service Type Improper Payment Rates: DME

Service Type Billed to DMEs	Improper Payment Rate	95% Confidence Interval	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Wheelchairs Manual	90.7%	86.5% - 94.8%	0.9%	97.4%	0.4%	0.0%	1.3%
Hospital Beds/Accessories	84.3%	78.7% - 89.9%	1.2%	95.8%	0.5%	0.8%	1.7%
Wheelchairs Motorized	81.8%	79.3% - 84.2%	0.8%	96.2%	2.8%	0.0%	0.1%
Diabetic Shoes	76.8%	67.1% - 86.5%	0.0%	97.9%	2.0%	0.0%	0.1%
Oxygen Supplies/Equipment	75.2%	72.6% - 77.7%	0.4%	97.3%	1.2%	0.0%	1.1%
Glucose Monitor	74.7%	71.8% - 77.5%	0.3%	90.0%	8.9%	0.3%	0.4%
Wheelchairs Options/Accessories	70.2%	59.3% - 81.1%	0.3%	95.8%	1.7%	0.0%	2.2%
Respiratory Assist Device	67.4%	57.9% - 76.9%	0.0%	95.3%	4.2%	0.0%	0.5%
CPAP	56.1%	49.0% - 63.2%	0.4%	98.1%	1.4%	0.0%	0.1%
Surgical Dressings	55.5%	41.8% - 69.1%	0.0%	98.0%	2.0%	0.0%	0.0%
Enteral Nutrition	55.1%	45.4% - 64.9%	1.8%	90.3%	3.9%	0.0%	4.0%
LSO	52.1%	42.6% - 61.5%	5.0%	91.2%	0.0%	0.0%	3.8%
Lower Limb Prostheses	48.4%	39.8% - 57.1%	0.1%	95.1%	4.3%	0.0%	0.5%
All Other Codes	48.2%	44.2% - 52.2%	1.1%	93.4%	2.2%	0.1%	3.2%
Immunosuppressive Drugs	46.3%	34.5% - 58.0%	0.0%	98.4%	0.0%	0.0%	1.6%
Parenteral Nutrition	44.7%	35.2% - 54.2%	0.0%	99.9%	0.1%	0.0%	0.0%
Lower Limb Orthoses	43.9%	25.8% - 61.9%	0.0%	68.4%	4.9%	3.2%	23.5%
Ostomy Supplies	43.0%	31.2% - 54.7%	0.1%	99.9%	0.0%	0.0%	0.0%
Nebulizers & Related Drugs	36.2%	22.0% - 50.3%	0.0%	97.6%	1.1%	0.0%	1.3%
Infusion Pumps & Related Drugs	28.8%	7.7% - 49.9%	0.6%	98.9%	0.4%	0.1%	0.0%
All Policy Groups with Less than 30 Claims	28.7%	10.9% - 46.5%	0.0%	100.0%	0.0%	0.0%	0.0%
All Types of Services	58.2%	54.9% - 61.5%	0.5%	94.9%	2.9%	0.2%	1.6%

Table C3: Top 20 Service Type Improper Payment Rates: Part A Excluding Inpatient Hospital PPS

Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Improper Payment Rate	95% Confidence Interval	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Hospital Other Part B	21.4%	13.6% - 29.1%	0.3%	96.6%	0.0%	3.1%	0.0%
Home Health	17.3%	14.9% - 19.8%	1.7%	81.4%	15.8%	1.1%	0.0%
Hospital Inpatient (Part A)	11.0%	5.9% - 16.1%	0.0%	61.0%	39.0%	0.0%	0.0%
Hospital Inpatient Part B	10.7%	6.9% - 14.4%	0.0%	99.2%	0.0%	0.7%	0.1%
Nonhospital based hospice	8.3%	5.1% - 11.5%	0.0%	63.3%	35.7%	1.0%	0.0%
Clinic CORF	7.8%	0.3% - 15.4%	0.0%	80.9%	19.1%	0.0%	0.0%
Clinic ESRD	7.8%	5.3% - 10.3%	0.1%	97.1%	0.0%	1.9%	0.9%
SNF Inpatient	7.7%	5.5% - 9.9%	0.0%	74.9%	4.2%	14.2%	6.7%
Clinical Rural Health	6.3%	1.9% - 10.8%	0.0%	100.0%	0.0%	0.0%	0.0%
Clinic OPT	5.9%	1.6% - 10.3%	44.6%	53.5%	0.0%	1.9%	0.0%
Hospital Outpatient	5.3%	4.0% - 6.6%	1.8%	84.6%	3.2%	6.9%	3.5%
Critical Access Hospital	4.9%	3.0% - 6.8%	0.0%	95.5%	0.0%	4.5%	0.0%
SNF Outpatient	4.9%	2.6% - 7.1%	1.7%	98.3%	0.0%	0.0%	0.0%
SNF Inpatient Part B	3.7%	1.2% - 6.2%	0.0%	96.0%	0.0%	4.0%	0.0%
Hospital based hospice	2.5%	(0.5%) - 5.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Federally Qualified Health Centers (Effective April 1, 2010)	2.0%	0.3% - 3.6%	0.0%	97.0%	0.0%	0.0%	3.0%
All Codes With Less Than 30 Claims	0.1%	(0.1%) - 0.4%	0.0%	83.4%	0.0%	16.6%	0.0%
All Types of Services	8.2%	7.2% - 9.1%	1.0%	79.2%	12.3%	5.2%	2.3%

Table C4: Top 20 Service Type Improper Payment Rates: Part A Inpatient Hospital PPS

Service Types for Which Part A Inpatient Hospital PPS are Responsible (MS-DRG Groups)	Improper Payment Rate	95% Confidence Interval	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Chest Pain (313)	61.2%	49.5% - 72.9%	0.0%	0.0%	99.1%	0.9%	0.0%
Medical Back Problems (551 , 552)	43.4%	35.8% - 51.1%	0.0%	0.0%	95.8%	4.2%	0.0%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	40.0%	36.1% - 43.9%	0.0%	5.2%	93.0%	1.5%	0.3%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	35.2%	33.0% - 37.4%	0.0%	0.8%	84.8%	14.5%	0.0%
Stomach, Esophageal & Duodenal Proc (326 , 327 , 328)	28.3%	27.0% - 29.7%	0.0%	2.5%	12.7%	84.9%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	28.3%	20.8% - 35.8%	0.0%	0.0%	95.8%	2.4%	1.8%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	19.1%	14.3% - 24.0%	0.0%	5.1%	90.3%	4.6%	0.0%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	19.1%	12.0% - 26.2%	0.0%	5.7%	82.7%	11.6%	0.0%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes (640 , 641)	17.4%	11.9% - 22.9%	0.0%	14.7%	76.6%	6.0%	2.7%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	17.1%	13.0% - 21.2%	0.0%	0.0%	95.6%	4.4%	0.0%
Psychoses (885)	14.4%	7.5% - 21.2%	0.0%	79.2%	19.4%	1.3%	0.0%
Renal Failure (682 , 683 , 684)	13.1%	8.4% - 17.8%	0.0%	0.0%	80.5%	19.5%	0.0%
Kidney & Urinary Tract Infections (689 , 690)	12.1%	6.0% - 18.1%	0.0%	10.4%	64.3%	25.3%	0.0%
Other Vascular Procedures (252 , 253 , 254)	10.5%	7.6% - 13.4%	0.0%	3.4%	91.9%	4.5%	0.3%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	10.2%	5.5% - 14.9%	0.0%	5.4%	82.2%	12.4%	0.0%
G.I. Hemorrhage (377 , 378 , 379)	8.8%	4.9% - 12.7%	0.0%	0.0%	79.6%	20.4%	0.0%
Heart Failure & Shock (291 , 292 , 293)	8.3%	4.9% - 11.8%	0.0%	2.8%	73.4%	12.0%	11.8%
All Other Codes	8.2%	7.1% - 9.3%	0.0%	5.5%	70.4%	23.2%	0.8%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	6.2%	3.2% - 9.2%	0.0%	0.0%	47.7%	52.3%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	5.8%	4.4% - 7.1%	0.0%	55.6%	37.0%	3.7%	3.7%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	4.9%	3.4% - 6.3%	0.0%	0.0%	51.0%	49.0%	0.0%
All Types of Services	9.9%	9.0% - 10.8%	0.0%	9.1%	71.0%	18.9%	0.9%

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

Appendix D tables are sorted in descending order by projected improper payments.¹ Some columns and/or rows may not sum correctly due to rounding.

Table D1: Top 20 Types of Services with No Documentation Errors

Part B (BETOS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	No Documentation Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
Major procedure, cardiovascular-Other	8.7%	\$153,136,434	(6.8%) - 24.2%	0.4%
Home Health	0.3%	\$53,286,487	(0.1%) - 0.7%	0.1%
Hospital visit - subsequent	0.8%	\$45,716,257	0.1% - 1.6%	0.1%
Hospital Outpatient	0.1%	\$43,600,589	(0.0%) - 0.2%	0.1%
Ambulatory procedures - other	5.2%	\$39,387,754	3.7% - 6.7%	0.1%
Office visits - established	0.2%	\$29,567,404	0.0% - 0.4%	0.1%
Specialist - ophthalmology	0.7%	\$17,495,838	(0.7%) - 2.1%	0.0%
Hospital visit - initial	0.6%	\$16,272,836	(0.2%) - 1.3%	0.0%
Standard imaging - other	4.1%	\$15,833,740	(3.7%) - 12.0%	0.0%
Lab tests - other (Medicare fee schedule)	0.6%	\$14,178,325	(0.4%) - 1.7%	0.0%
Nursing home visit	0.8%	\$13,471,238	0.1% - 1.4%	0.0%
Clinic OPT	2.6%	\$12,688,376	1.5% - 3.8%	0.0%
Ambulatory procedures - skin	0.4%	\$7,853,139	(0.2%) - 0.9%	0.0%
Minor procedures - other (Medicare fee schedule)	0.2%	\$6,772,148	(0.1%) - 0.4%	0.0%
Hospital visit - critical care	0.7%	\$6,340,944	(0.3%) - 1.7%	0.0%
Other drugs	0.1%	\$5,216,828	(0.0%) - 0.2%	0.0%
LSO	2.6%	\$4,537,510	(0.5%) - 5.7%	0.0%
Oxygen Supplies/Equipment	0.3%	\$4,385,632	(0.0%) - 0.6%	0.0%
Chiropractic	0.8%	\$4,035,326	0.3% - 1.3%	0.0%
Specialist - psychiatry	0.4%	\$3,888,802	(0.2%) - 1.1%	0.0%
All Other Codes	0.0%	\$51,509,172	0.0% - 0.0%	0.1%
Overall	0.2%	\$549,174,783	0.0% - 0.3%	1.4%

¹ Percent of overall projected improper payment unadusted for impact of A/B rebilling

Table D2: Top 20 Types of Services with Insufficient Documentation Errors

Part B (BETOS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	Insufficient Documentation Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
Home Health	14.1%	\$2,515,508,516	11.8% - 16.4%	6.6%
Hospital Outpatient	4.5%	\$2,068,315,613	3.3% - 5.6%	5.4%
SNF Inpatient	5.8%	\$1,858,450,137	3.8% - 7.8%	4.9%
Oxygen Supplies/Equipment	73.2%	\$1,135,163,596	70.6% - 75.8%	3.0%
Glucose Monitor	67.2%	\$837,889,885	63.9% - 70.5%	2.2%
Clinic ESRD	7.6%	\$790,150,552	5.1% - 10.1%	2.1%
Lab tests - other (non-Medicare fee schedule)	25.7%	\$708,025,790	19.8% - 31.6%	1.9%
Nonhospital based hospice	5.3%	\$650,395,225	2.7% - 7.8%	1.7%
Minor procedures - other (Medicare fee schedule)	16.1%	\$608,383,519	12.6% - 19.5%	1.6%
Hospital visit - subsequent	10.5%	\$577,010,546	8.6% - 12.4%	1.5%
Hospital Inpatient (Part A)	6.7%	\$569,766,613	2.7% - 10.7%	1.5%
Office visits - established	3.5%	\$466,738,441	2.5% - 4.4%	1.2%
Psychoses (885)	11.4%	\$405,392,330	4.9% - 17.8%	1.1%
Other drugs	5.3%	\$367,594,520	2.3% - 8.3%	1.0%
CPAP	55.0%	\$362,646,884	47.9% - 62.1%	0.9%
Wheelchairs Motorized	78.7%	\$316,582,828	76.0% - 81.4%	0.8%
Nebulizers & Related Drugs	35.3%	\$286,052,362	21.4% - 49.2%	0.7%
Chiropractic	47.9%	\$253,045,786	42.2% - 53.5%	0.7%
Wheelchairs Options/Accessories	67.3%	\$207,078,775	56.2% - 78.3%	0.5%
Critical Access Hospital	4.7%	\$206,065,672	2.8% - 6.6%	0.5%
All Other Codes	3.5%	\$6,525,078,442	3.2% - 3.9%	17.1%
Overall	6.1%	\$21,715,336,035	5.6% - 6.6%	56.8%

Table D3: Top 20 Types of Services with Medical Necessity Errors

Part B (BETOS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	Medical Necessity Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
Home Health	2.7%	\$489,298,599	1.8% - 3.7%	1.3%
Nonhospital based hospice	3.0%	\$366,599,400	1.0% - 4.9%	1.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	27.1%	\$365,676,586	19.5% - 34.7%	1.0%
Hospital Inpatient (Part A)	4.3%	\$364,857,706	0.9% - 7.7%	1.0%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	29.8%	\$353,243,286	27.6% - 32.0%	0.9%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	17.3%	\$310,803,190	12.5% - 22.0%	0.8%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	37.2%	\$265,622,547	33.3% - 41.1%	0.7%
Renal Failure (682 , 683 , 684)	10.5%	\$263,801,293	6.1% - 15.0%	0.7%
Chest Pain (313)	60.6%	\$249,026,777	48.5% - 72.7%	0.7%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	16.4%	\$222,601,912	12.3% - 20.4%	0.6%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	8.4%	\$205,533,968	3.7% - 13.1%	0.5%
Heart Failure & Shock (291 , 292 , 293)	6.1%	\$203,844,812	3.3% - 8.9%	0.5%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	15.8%	\$193,261,992	8.9% - 22.8%	0.5%
Medical Back Problems (551 , 552)	41.6%	\$191,353,179	34.1% - 49.1%	0.5%
Other Vascular Procedures (252 , 253 , 254)	9.7%	\$167,261,592	6.7% - 12.6%	0.4%
Biopsies Of Musculoskeletal System & Connective Tissue (477 , 478 , 479)	55.6%	\$156,176,150	52.1% - 59.1%	0.4%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes (640 , 641)	13.3%	\$152,075,960	8.0% - 18.7%	0.4%
G.I. Hemorrhage (377 , 378 , 379)	7.0%	\$150,322,360	3.1% - 10.9%	0.4%
Other Digestive System Diagnoses (393 , 394 , 395)	13.9%	\$134,734,336	10.5% - 17.3%	0.4%
Kidney & Urinary Tract Infections (689 , 690)	7.8%	\$125,409,285	2.0% - 13.5%	0.3%
All Other Codes	1.8%	\$5,245,103,009	1.5% - 2.0%	13.7%
Overall	2.8%	\$10,176,607,941	2.5% - 3.2%	26.6%

Table D4: Top 20 Types of Services with Incorrect Coding Errors

Part B (BETOS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	Incorrect Coding Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
Hospital visit - initial	21.5%	\$606,332,235	19.6% - 23.4%	1.6%
Office visits - established	3.4%	\$464,182,897	2.9% - 4.0%	1.2%
Office visits - new	15.9%	\$415,289,954	13.5% - 18.3%	1.1%
Hospital visit - subsequent	6.8%	\$372,768,386	6.0% - 7.6%	1.0%
SNF Inpatient	1.1%	\$352,882,666	0.6% - 1.6%	0.9%
Emergency room visit	9.5%	\$195,199,705	7.6% - 11.5%	0.5%
Hospital Outpatient	0.4%	\$167,601,424	0.1% - 0.7%	0.4%
Stomach, Esophageal & Duodenal Proc (326 , 327 , 328)	24.1%	\$148,662,185	23.4% - 24.7%	0.4%
Nursing home visit	7.3%	\$130,688,002	6.0% - 8.6%	0.3%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	2.4%	\$116,892,600	1.0% - 3.8%	0.3%
Hospital visit - critical care	10.9%	\$95,139,975	7.9% - 13.9%	0.2%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	3.2%	\$94,057,910	1.3% - 5.2%	0.2%
Combined Anterior/Posterior Spinal Fusion (453 , 454 , 455)	9.4%	\$92,988,153	9.1% - 9.8%	0.2%
Major Chest Procedures (163 , 164 , 165)	10.8%	\$81,479,573	5.5% - 16.0%	0.2%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	3.3%	\$73,344,607	1.8% - 4.8%	0.2%
Renal Failure (682 , 683 , 684)	2.6%	\$63,875,629	0.8% - 4.3%	0.2%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	5.1%	\$60,297,641	4.6% - 5.6%	0.2%
Extensive O.R. Procedure Unrelated To Principal Diagnosis (981 , 982 , 983)	2.6%	\$49,952,389	1.6% - 3.7%	0.1%
Kidney & Urinary Tract Infections (689 , 690)	3.0%	\$49,280,348	2.0% - 4.1%	0.1%
G.I. Hemorrhage (377 , 378 , 379)	1.8%	\$38,508,839	1.3% - 2.3%	0.1%
All Other Codes	0.7%	\$1,578,116,790	0.5% - 0.8%	4.1%
Overall	1.5%	\$5,247,541,907	1.3% - 1.6%	13.7%

Table D5: Top 20 Types of Services with Downcoding Errors

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

Part B (BETOS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	Downcoding Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
Hospital Outpatient	0.2%	\$94,479,964	(0.0%) - 0.4%	0.2%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	1.7%	\$81,143,845	0.4% - 2.9%	0.2%
Office visits - established	0.6%	\$79,002,585	0.3% - 0.8%	0.2%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	4.9%	\$57,866,193	4.4% - 5.3%	0.2%
Renal Failure (682 , 683 , 684)	2.1%	\$52,897,742	0.4% - 3.8%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	2.1%	\$47,572,496	0.8% - 3.5%	0.1%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	1.5%	\$43,591,515	0.6% - 2.4%	0.1%
G.I. Hemorrhage (377 , 378 , 379)	1.7%	\$36,779,094	1.2% - 2.2%	0.1%
Kidney & Urinary Tract Infections (689 , 690)	2.2%	\$35,474,268	1.3% - 3.1%	0.1%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	1.3%	\$30,930,704	1.0% - 1.5%	0.1%
Respiratory Infections & Inflammations (177 , 178 , 179)	1.8%	\$30,643,935	1.3% - 2.3%	0.1%
Other Kidney & Urinary Tract Procedures (673 , 674 , 675)	8.3%	\$28,582,483	7.3% - 9.3%	0.1%
Heart Failure & Shock (291 , 292 , 293)	0.8%	\$27,683,211	(0.1%) - 1.7%	0.1%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	2.2%	\$27,046,830	1.0% - 3.4%	0.1%
Hospital visit - subsequent	0.5%	\$24,812,962	0.3% - 0.6%	0.1%
Peripheral Vascular Disorders (299 , 300 , 301)	3.8%	\$17,332,812	3.6% - 4.0%	0.0%
SNF Inpatient	0.0%	\$15,899,649	(0.0%) - 0.1%	0.0%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	0.9%	\$15,434,716	(0.2%) - 1.9%	0.0%
Home Health	0.1%	\$14,369,265	0.0% - 0.1%	0.0%
Laparoscopic Cholecystectomy W/O C.D.E. (417 , 418 , 419)	1.9%	\$13,841,809	0.2% - 3.6%	0.0%
All Other Codes	0.3%	\$578,019,310	0.2% - 0.3%	1.5%
Overall	0.4%	\$1,353,405,387	0.3% - 0.5%	3.5%

Table D6: Top 20 Types of Services with Other Errors

Part B (BETOS), DME (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG Groups)	Other Errors			
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval	Percent of Overall Projected Improper Payment
SNF Inpatient	0.5%	\$165,798,544	(0.1%) - 1.1%	0.4%
Hospital Outpatient	0.2%	\$85,240,370	(0.2%) - 0.5%	0.2%
Heart Failure & Shock (291 , 292 , 293)	1.0%	\$32,745,309	(0.9%) - 2.9%	0.1%
Lower Limb Orthoses	10.3%	\$25,987,447	(3.1%) - 23.6%	0.1%
Minor procedures - musculoskeletal	2.2%	\$22,973,654	(1.9%) - 6.3%	0.1%
Other Disorders Of Nervous System (091 , 092 , 093)	7.0%	\$19,771,672	6.4% - 7.5%	0.1%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	0.7%	\$14,682,985	(0.5%) - 1.9%	0.0%
Oxygen Supplies/Equipment	0.8%	\$12,331,716	0.2% - 1.4%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	0.2%	\$12,107,190	(0.0%) - 0.5%	0.0%
Minor procedures - other (Medicare fee schedule)	0.3%	\$10,016,660	0.2% - 0.3%	0.0%
Enteral Nutrition	2.2%	\$8,322,204	(0.6%) - 5.1%	0.0%
G.I. Obstruction (388 , 389 , 390)	1.0%	\$7,411,170	(0.4%) - 2.3%	0.0%
Clinic ESRD	0.1%	\$7,229,090	(0.1%) - 0.2%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	0.5%	\$6,925,812	0.4% - 0.6%	0.0%
Nursing home visit	0.4%	\$6,814,720	(0.4%) - 1.1%	0.0%
Other - Medicare fee schedule	3.9%	\$6,750,410	(1.5%) - 9.3%	0.0%
Standard imaging - musculoskeletal	1.0%	\$6,057,299	(0.5%) - 2.5%	0.0%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes (640 , 641)	0.5%	\$5,451,546	(0.4%) - 1.4%	0.0%
Hospital visit - subsequent	0.1%	\$5,409,358	(0.0%) - 0.2%	0.0%
TENS	8.1%	\$5,019,151	3.2% - 13.0%	0.0%
All Other Codes	0.0%	\$72,245,031	0.0% - 0.0%	0.2%
Overall	0.2%	\$539,291,338	0.1% - 0.2%	1.4%

Appendix E: Projected Improper Payments by Type of Service for Claim Type

This series of tables is sorted in descending order by projected improper payments. All estimates in this table are based on a minimum of 30 lines in the sample. Some columns and/or rows may not sum correctly due to rounding.

Table E1: Improper Payment Rates by Service Type: Part B

Service Types Billed to Part B (BETOS)	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Hospital visit - subsequent	18.2%	1,773	\$1,000,904,548	1.0%	16.2% - 20.3%
Office visits - established	7.1%	2,006	\$964,723,508	0.5%	6.1% - 8.2%
Hospital visit - initial	28.3%	775	\$798,577,177	1.2%	26.0% - 30.6%
Lab tests - other (non-Medicare fee schedule)	26.1%	1,260	\$719,696,845	3.0%	20.2% - 32.0%
Minor procedures - other (Medicare fee schedule)	18.2%	1,476	\$690,793,236	1.8%	14.7% - 21.7%
Office visits - new	18.9%	441	\$492,745,979	1.4%	16.2% - 21.5%
Other drugs	5.6%	1,142	\$385,192,937	1.5%	2.6% - 8.6%
Ambulance	6.7%	729	\$313,596,261	1.2%	4.4% - 9.1%
Chiropractic	51.7%	468	\$273,488,430	2.9%	46.1% - 57.4%
Nursing home visit	13.9%	521	\$247,766,792	1.2%	11.5% - 16.2%
Emergency room visit	11.6%	397	\$238,543,506	1.2%	9.2% - 14.0%
All Codes With Less Than 30 Claims	8.2%	166	\$206,387,963	2.4%	3.6% - 12.8%
Other tests - other	9.7%	578	\$200,247,421	2.8%	4.3% - 15.1%
Hospital visit - critical care	22.9%	234	\$199,824,964	2.6%	17.8% - 28.0%
Specialist - psychiatry	21.5%	423	\$189,200,846	2.9%	15.7% - 27.2%
Advanced imaging - CAT/CT/CTA: other	15.3%	487	\$165,165,033	3.8%	7.9% - 22.7%
Major procedure, cardiovascular-Other	9.1%	238	\$160,285,190	7.9%	(6.3%) - 24.5%
Lab tests - other (Medicare fee schedule)	6.9%	312	\$151,690,810	2.1%	2.7% - 11.0%
Minor procedures - musculoskeletal	10.4%	407	\$108,336,462	2.7%	5.1% - 15.7%
Standard imaging - nuclear medicine	10.1%	374	\$101,501,458	2.2%	5.8% - 14.3%
Standard imaging - musculoskeletal	15.0%	427	\$89,816,753	2.0%	11.0% - 18.9%
Dialysis services (Medicare Fee Schedule)	10.8%	149	\$87,916,572	2.1%	6.7% - 14.8%
Echography/ultrasonography - heart	9.4%	322	\$86,440,820	2.5%	4.5% - 14.3%
Eye procedure - cataract removal/lens insertion	4.2%	207	\$84,012,930	1.8%	0.7% - 7.7%
Advanced imaging - MRI/MRA: other	8.2%	301	\$81,115,494	1.8%	4.7% - 11.6%
Other tests - EKG monitoring	21.5%	53	\$78,778,698	15.8%	(9.5%) - 52.6%
Standard imaging - chest	18.0%	343	\$75,387,839	1.7%	14.7% - 21.4%
Lab tests - automated general profiles	21.5%	333	\$70,451,088	2.7%	16.3% - 26.7%
Specialist - other	11.5%	788	\$70,044,402	3.5%	4.7% - 18.3%
Home visit	22.3%	50	\$68,649,880	9.0%	4.7% - 39.9%
Ambulatory procedures - other	9.1%	229	\$68,474,630	1.4%	6.3% - 11.9%
Specialist - ophthalmology	2.8%	566	\$67,082,449	0.9%	1.1% - 4.5%
Ambulatory procedures - skin	3.1%	335	\$64,305,273	0.6%	1.9% - 4.2%

Service Types Billed to Part B (BETOS)	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Lab tests - blood counts	20.8%	228	\$60,605,528	3.1%	14.8% - 26.8%
Advanced imaging - CAT/CT/CTA: brain/head/neck	19.5%	134	\$60,103,518	3.1%	13.3% - 25.6%
Echography/ultrasonography - other	9.5%	177	\$56,279,637	2.0%	5.5% - 13.5%
Endoscopy - upper gastrointestinal	8.9%	145	\$49,887,836	1.3%	6.4% - 11.3%
Oncology - radiation therapy	3.8%	296	\$48,430,914	1.0%	1.9% - 5.7%
Other - Medicare fee schedule	28.1%	100	\$48,293,561	7.5%	13.3% - 42.9%
Chemotherapy	2.0%	183	\$42,455,496	0.7%	0.7% - 3.2%
Other tests - electrocardiograms	12.2%	443	\$40,016,933	1.6%	9.2% - 15.3%
Endoscopy - colonoscopy	4.3%	351	\$37,431,495	0.8%	2.7% - 5.8%
Lab tests - routine venipuncture (non-Medicare fee schedule)	24.9%	442	\$36,164,953	2.3%	20.3% - 29.4%
Standard imaging - other	9.3%	134	\$35,965,986	4.2%	1.0% - 17.6%
Anesthesia	1.6%	307	\$33,176,372	0.5%	0.5% - 2.7%
Minor procedures - skin	2.9%	383	\$33,069,466	0.5%	1.8% - 3.9%
Oncology - other	7.8%	247	\$27,866,702	1.0%	5.7% - 9.8%
Advanced imaging - MRI/MRA: brain/head/neck	8.5%	120	\$24,275,778	2.7%	3.2% - 13.9%
Endoscopy - cystoscopy	4.0%	128	\$24,232,653	0.2%	3.5% - 4.4%
Echography/ultrasonography - abdomen/pelvis	8.2%	155	\$23,887,361	1.5%	5.2% - 11.2%
Eye procedure - other	2.2%	386	\$21,596,740	0.9%	0.4% - 4.1%
Major procedure - Other	1.1%	84	\$20,377,278	0.7%	(0.3%) - 2.5%
Echography/ultrasonography - carotid arteries	7.1%	109	\$19,323,241	2.3%	2.6% - 11.6%
Lab tests - bacterial cultures	26.5%	82	\$18,673,853	5.0%	16.7% - 36.4%
Standard imaging - breast	4.3%	136	\$18,659,578	2.1%	0.2% - 8.4%
Other tests - cardiovascular stress tests	12.7%	255	\$17,714,579	2.4%	8.0% - 17.3%
Lab tests - urinalysis	25.5%	272	\$16,109,309	2.4%	20.9% - 30.2%
Echography/ultrasonography - eye	11.0%	47	\$15,911,264	2.5%	6.1% - 15.9%
Imaging/procedure - other	4.5%	253	\$14,478,177	1.4%	1.7% - 7.3%
Other - non-Medicare fee schedule	24.4%	52	\$14,153,171	9.2%	6.4% - 42.5%
Major procedure, cardiovascular-Coronary angioplasty (PTCA)	6.1%	100	\$13,141,389	2.2%	1.8% - 10.4%
Major procedure, orthopedic - Knee replacement	3.1%	99	\$9,932,457	1.7%	(0.2%) - 6.5%
Immunizations/Vaccinations	0.7%	231	\$3,132,826	0.1%	0.5% - 0.8%
Standard imaging - contrast gastrointestinal	2.7%	38	\$2,825,784	1.3%	0.1% - 5.3%
Lab tests - glucose	12.0%	75	\$1,770,477	2.1%	7.8% - 16.1%
Undefined codes	N/A	556	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	10.5%	17,130	\$9,491,090,506	0.5%	9.5% - 11.5%

Table E2: Improper Payment Rates by Service Type: DME

Service Types Billed to DMEs	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Oxygen Supplies/Equipment	75.2%	1,521	\$1,166,165,190	1.3%	72.6% - 77.7%
Glucose Monitor	74.7%	1,437	\$930,847,134	1.5%	71.8% - 77.5%
CPAP	56.1%	604	\$369,634,140	3.6%	49.0% - 63.2%
Wheelchairs Motorized	81.8%	1,387	\$329,070,885	1.3%	79.3% - 84.2%
Nebulizers & Related Drugs	36.2%	716	\$292,958,188	7.2%	22.0% - 50.3%
Wheelchairs Options/Accessories	70.2%	893	\$216,163,799	5.6%	59.3% - 81.1%
Lower Limb Prostheses	48.4%	493	\$208,427,384	4.4%	39.8% - 57.1%
Enteral Nutrition	55.1%	237	\$206,508,324	5.0%	45.4% - 64.9%
Wheelchairs Manual	90.7%	307	\$186,408,395	2.1%	86.5% - 94.8%
Immunosuppressive Drugs	46.3%	148	\$180,813,864	6.0%	34.5% - 58.0%
Hospital Beds/Accessories	84.3%	483	\$159,278,037	2.9%	78.7% - 89.9%
Diabetic Shoes	76.8%	141	\$156,108,741	5.0%	67.1% - 86.5%
Infusion Pumps & Related Drugs	28.8%	224	\$144,358,581	10.8%	7.7% - 49.9%
All Policy Groups with Less than 30 Claims	28.7%	190	\$117,453,205	9.1%	10.9% - 46.5%
Lower Limb Orthoses	43.9%	259	\$110,817,724	9.2%	25.8% - 61.9%
LSO	52.1%	131	\$90,852,815	4.8%	42.6% - 61.5%
Ostomy Supplies	43.0%	201	\$80,612,076	6.0%	31.2% - 54.7%
Respiratory Assist Device	67.4%	121	\$75,047,163	4.8%	57.9% - 76.9%
Surgical Dressings	55.5%	155	\$72,961,199	7.0%	41.8% - 69.1%
Parenteral Nutrition	44.7%	154	\$60,804,432	4.9%	35.2% - 54.2%
TENS	93.3%	113	\$58,121,316	3.6%	86.2% -100.4%
Support Surfaces	73.5%	1,106	\$53,582,034	2.6%	68.4% - 78.5%
Negative Pressure Wound Therapy	38.8%	87	\$51,744,085	6.2%	26.7% - 50.9%
Urological Supplies	31.1%	131	\$44,732,514	7.4%	16.6% - 45.6%
Walkers	57.1%	73	\$43,912,147	6.8%	43.8% - 70.5%
Wheelchairs Seating	81.9%	281	\$42,188,172	2.6%	76.9% - 86.9%
Misc DMEPOS	91.3%	30	\$24,864,960	4.4%	82.7% -100.0%
POV	96.5%	59	\$24,004,149	2.0%	92.6% -100.4%
Commodos/Bed Pans/Urinals	95.7%	85	\$23,797,974	2.5%	90.9% -100.5%
Impotence Aid	65.4%	50	\$22,284,281	6.7%	52.4% - 78.5%
Patient Lift	80.7%	88	\$20,433,908	4.1%	72.6% - 88.7%
Breast Prostheses	32.6%	72	\$14,084,891	6.7%	19.5% - 45.8%
Ventilators	30.3%	110	\$13,270,107	4.5%	21.5% - 39.2%
Lenses	22.2%	63	\$10,978,820	5.5%	11.4% - 33.0%
Suction Pump	71.1%	86	\$10,878,093	7.5%	56.4% - 85.7%
Repairs/DME	82.8%	94	\$10,179,002	4.2%	74.6% - 91.0%
CPM Device	50.5%	62	\$9,973,262	6.9%	37.1% - 63.9%
Osteogenesis Stimulator	10.8%	105	\$8,829,836	2.5%	5.9% - 15.6%
Upper Limb Orthoses	25.4%	53	\$7,881,023	9.4%	7.0% - 43.8%
Automatic External Defibrillator	12.3%	68	\$5,285,297	5.4%	1.8% - 22.8%
HFCWO Device	26.4%	51	\$4,198,306	7.0%	12.6% - 40.1%
Canes/Crutches	47.6%	30	\$3,053,988	9.4%	29.2% - 66.0%

Service Types Billed to DMEs	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Speech Generating Devices	11.6%	54	\$2,318,377	4.8%	2.2% - 20.9%
Heat/Cold Application	43.9%	60	\$495,242	17.1%	10.5% - 77.4%
<u>Routinely Denied Items</u>	N/A	82	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	58.2%	11,204	\$5,666,383,056	1.7%	54.9% - 61.5%

Table E3: Improper Payment Rates by Service Type: Part A Excluding Inpatient Hospital PPS

Service Types Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Home Health	17.3%	1,379	\$3,091,382,940	1.3%	14.9% - 19.8%
SNF Inpatient	7.7%	1,035	\$2,481,992,495	1.1%	5.5% - 9.9%
Hospital Outpatient	5.3%	2,408	\$2,443,555,475	0.7%	4.0% - 6.6%
Nonhospital based hospice	8.3%	399	\$1,027,433,960	1.6%	5.1% - 11.5%
Hospital Inpatient (Part A)	11.0%	246	\$934,624,319	2.6%	5.9% - 16.1%
Clinic ESRD	7.8%	409	\$813,485,526	1.3%	5.3% - 10.3%
Critical Access Hospital	4.9%	325	\$215,880,132	1.0%	3.0% - 6.8%
Hospital Other Part B	21.4%	175	\$130,796,056	4.0%	13.6% - 29.1%
SNF Inpatient Part B	3.7%	200	\$85,354,486	1.3%	1.2% - 6.2%
Clinical Rural Health	6.3%	379	\$60,707,386	2.3%	1.9% - 10.8%
Hospital Inpatient Part B	10.7%	81	\$58,277,067	1.9%	6.9% - 14.4%
Clinic OPT	5.9%	89	\$28,474,746	2.2%	1.6% - 10.3%
Hospital based hospice	2.5%	80	\$27,554,029	1.5%	(0.5%) - 5.5%
Federally Qualified Health Centers (Effective April 1, 2010)	2.0%	270	\$13,566,412	0.8%	0.3% - 3.6%
SNF Outpatient	4.9%	52	\$12,437,025	1.1%	2.6% - 7.1%
All Codes With Less Than 30 Claims	0.1%	27	\$1,633,651	0.1%	(0.1%) - 0.4%
Clinic CORF	7.8%	42	\$1,382,956	3.8%	0.3% - 15.4%
All Type of Services (Incl. Codes Not Listed)	8.2%	7,596	\$11,428,538,662	0.5%	7.2% - 9.1%

Table E4: Improper Payment Rates by Service Type: Part A Inpatient Hospital PPS

PPS Acute Care Hospital Service Types Billed to Inpatient Hospital PPS (MS-DRG Groups)	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
All Codes With Less Than 30 Claims	6.6%	641	\$2,583,033,200	0.9%	4.9% - 8.3%
Psychoses (885)	14.4%	109	\$511,645,568	3.5%	7.5% - 21.2%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	35.2%	843	\$416,800,119	1.1%	33.0% - 37.4%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	28.3%	64	\$381,783,962	3.8%	20.8% - 35.8%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	19.1%	200	\$344,376,975	2.5%	14.3% - 24.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	5.8%	1,205	\$328,673,168	0.7%	4.4% - 7.1%
Renal Failure (682 , 683 , 684)	13.1%	133	\$327,676,922	2.4%	8.4% - 17.8%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	40.0%	481	\$285,475,294	2.0%	36.1% - 43.9%
Heart Failure & Shock (291 , 292 , 293)	8.3%	156	\$277,804,435	1.8%	4.9% - 11.8%
Chest Pain (313)	61.2%	52	\$251,352,883	6.0%	49.5% - 72.9%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	10.2%	119	\$249,921,946	2.4%	5.5% - 14.9%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	4.9%	231	\$238,369,791	0.7%	3.4% - 6.3%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	19.1%	83	\$233,583,450	3.6%	12.0% - 26.2%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	17.1%	240	\$232,874,991	2.1%	13.0% - 21.2%
Medical Back Problems (551 , 552)	43.4%	56	\$199,779,765	3.9%	35.8% - 51.1%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes (640 , 641)	17.4%	63	\$198,538,133	2.8%	11.9% - 22.9%
Kidney & Urinary Tract Infections (689 , 690)	12.1%	70	\$195,024,628	3.1%	6.0% - 18.1%
G.I. Hemorrhage (377 , 378 , 379)	8.8%	110	\$188,831,199	2.0%	4.9% - 12.7%
Other Vascular Procedures (252 , 253 , 254)	10.5%	355	\$181,995,430	1.5%	7.6% - 13.4%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	6.2%	130	\$179,773,165	1.5%	3.2% - 9.2%
Stomach, Esophageal & Duodenal Proc (326 , 327 , 328)	28.3%	62	\$175,179,894	0.7%	27.0% - 29.7%
Back & Neck Proc Exc Spinal Fusion (490 , 491)	32.6%	216	\$158,799,569	3.4%	25.9% - 39.2%
Biopsies Of Musculoskeletal System & Connective Tissue (477 , 478 , 479)	56.4%	107	\$158,376,304	1.8%	53.0% - 59.9%
Other Digestive System Diagnoses (393 , 394 , 395)	15.3%	77	\$147,592,707	1.9%	11.5% - 19.0%
Signs & Symptoms (947 , 948)	43.1%	49	\$121,076,503	4.4%	34.4% - 51.7%
Spinal Fusion Except Cervical (459 , 460)	7.8%	480	\$121,042,517	1.2%	5.4% - 10.2%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	5.3%	91	\$116,823,162	1.0%	3.3% - 7.2%
Laparoscopic Cholecystectomy W/O C.D.E. (417 , 418 , 419)	15.2%	68	\$111,316,242	2.0%	11.3% - 19.2%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	29.3%	311	\$110,449,194	2.7%	24.1% - 34.5%
Combined Anterior/Posterior Spinal Fusion (453 , 454 , 455)	10.8%	55	\$106,024,823	0.5%	9.8% - 11.7%
Syncope & Collapse (312)	18.6%	50	\$105,471,885	4.5%	9.7% - 27.4%
Peripheral Vascular Disorders (299 , 300 , 301)	22.8%	56	\$104,852,540	1.0%	21.0% - 24.7%
Hernia Procedures Except Inguinal & Femoral (353 , 354 , 355)	55.5%	52	\$104,537,896	2.2%	51.2% - 59.7%
Transient Ischemia (069)	24.3%	56	\$95,249,087	5.3%	13.8% - 34.7%
Major Chest Procedures (163 , 164 , 165)	11.8%	46	\$89,227,575	2.8%	6.3% - 17.3%
Lower Extrem & Humer Proc Except Hip, foot,	18.6%	139	\$82,981,121	2.6%	13.5% - 23.6%

PPS Acute Care Hospital Service Types Billed to Inpatient Hospital PPS (MS-DRG Groups)	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
femur (492 , 493 , 494)					
Uterine & Adnexa Proc For Non-Malignancy (742 , 743)	31.1%	50	\$82,303,831	2.0%	27.2% - 34.9%
Thyroid, Parathyroid & Thyroglossal Procedures (625 , 626 , 627)	47.0%	45	\$78,461,875	1.5%	44.1% - 49.9%
Other Kidney & Urinary Tract Procedures (673 , 674 , 675)	21.5%	102	\$74,383,053	2.4%	16.7% - 26.2%
Fx, Sprn, Strn & Dist Except Femur, Hip, Pelvis & Thigh (562 , 563)	35.5%	56	\$73,440,977	3.0%	29.6% - 41.5%
Major Gastrointestinal Disorders & Peritoneal Infections (371 , 372 , 373)	11.8%	67	\$71,680,999	2.2%	7.5% - 16.1%
Cellulitis (602 , 603)	6.8%	55	\$65,970,902	1.3%	4.2% - 9.4%
Other Disorders Of Nervous System (091 , 092 , 093)	23.1%	214	\$65,685,385	1.9%	19.5% - 26.8%
Complications Of Treatment (919 , 920 , 921)	19.0%	105	\$63,431,006	0.9%	17.2% - 20.8%
Major Cardiovasc Procedures (237 , 238)	4.0%	50	\$60,334,093	1.2%	1.6% - 6.4%
Red Blood Cell Disorders (811 , 812)	8.6%	58	\$59,877,473	1.5%	5.7% - 11.4%
Extensive O.R. Procedure Unrelated To Principal Diagnosis (981 , 982 , 983)	3.1%	64	\$58,189,794	0.6%	1.8% - 4.3%
Dysequilibrium (149)	54.5%	47	\$55,217,134	5.4%	43.8% - 65.1%
Cervical Spinal Fusion (471 , 472 , 473)	8.0%	51	\$53,536,767	2.5%	3.1% - 12.9%
Hypertension (304 , 305)	45.2%	55	\$52,437,011	6.2%	33.1% - 57.3%
Atherosclerosis (302 , 303)	34.4%	52	\$52,355,148	4.9%	24.8% - 44.1%
Other Musculoskelet Sys & Conn Tiss O.R. Proc (515 , 516 , 517)	17.5%	155	\$51,343,097	1.3%	14.9% - 20.1%
Other Circulatory System O.R. Procedures (264)	12.6%	317	\$50,499,546	1.6%	9.5% - 15.7%
Perc Cardiovasc Proc W Non-Drug-Eluting Stent (248 , 249)	9.7%	52	\$50,450,011	1.3%	7.1% - 12.3%
Cranial & Peripheral Nerve Disorders (073 , 074)	22.7%	179	\$48,813,822	2.5%	17.8% - 27.7%
Other Respiratory System Diagnoses (205 , 206)	18.0%	57	\$40,830,905	2.4%	13.4% - 22.6%
Trauma To The Skin, Subcut Tiss & Breast (604 , 605)	37.1%	154	\$39,557,369	4.3%	28.7% - 45.5%
Diabetes (637 , 638 , 639)	7.6%	70	\$38,665,884	0.6%	6.4% - 8.7%
Transurethral Prostatectomy (713 , 714)	35.7%	108	\$36,614,776	2.5%	30.8% - 40.6%
Respiratory Signs & Symptoms (204)	44.3%	52	\$34,896,958	5.7%	33.2% - 55.4%
Respiratory Infections & Inflammations (177 , 178 , 179)	2.0%	37	\$33,594,270	0.3%	1.4% - 2.5%
Disorders Of The Biliary Tract (444 , 445 , 446)	20.6%	59	\$31,405,068	1.6%	17.5% - 23.7%
Other Skin, Subcut Tiss & Breast Proc (579 , 580 , 581)	59.4%	50	\$30,652,147	6.1%	47.5% - 71.3%
Bronchitis & Asthma (202 , 203)	11.4%	54	\$30,057,907	2.0%	7.5% - 15.3%
Bone Diseases & Arthropathies (553 , 554)	27.4%	92	\$28,381,621	3.4%	20.6% - 34.1%
Female Reproductive System Reconstructive Procedures (748)	52.5%	47	\$27,211,964	6.2%	40.4% - 64.7%
Seizures (100 , 101)	6.8%	58	\$25,873,751	2.8%	1.3% - 12.4%
Major Joint & Limb Reattachment Proc Of Upper Extremity (483 , 484)	6.7%	102	\$24,441,908	2.1%	2.7% - 10.7%
G.I. Obstruction (388 , 389 , 390)	2.9%	70	\$21,981,816	0.6%	1.7% - 4.2%
Poisoning & Toxic Effects Of Drugs (917 , 918)	5.4%	57	\$21,495,229	1.5%	2.5% - 8.3%
AICD Generator Procedures (245)	31.2%	550	\$21,198,912	2.2%	26.9% - 35.5%
Signs & Symptoms Of Musculoskeletal System & Conn Tissue (555 , 556)	30.6%	52	\$20,096,226	4.1%	22.7% - 38.6%

Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	1.1%	36	\$19,558,781	0.5%	0.2% - 2.1%
Traumatic Stupor & Coma, Coma <1 Hr (085 , 086 , 087)	7.0%	55	\$14,779,405	0.9%	5.3% - 8.7%
Disorders Of Pancreas Except Malignancy (438 , 439 , 440)	2.9%	66	\$13,955,472	0.9%	1.1% - 4.7%
Major Small & Large Bowel Procedures (329 , 330 , 331)	0.6%	137	\$13,911,345	0.2%	0.2% - 0.9%
Urinary Stones W/O Esw Lithotripsy (693 , 694)	19.4%	56	\$13,866,701	3.6%	12.4% - 26.4%
Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463 , 464 , 465)	8.3%	102	\$13,067,082	1.9%	4.6% - 12.0%
Major Male Pelvic Procedures (707 , 708)	7.4%	44	\$12,996,043	3.2%	1.1% - 13.6%
Other Digestive System O.R. Procedures (356 , 357 , 358)	8.0%	115	\$12,387,446	1.6%	4.9% - 11.1%
Angina Pectoris (311)	34.7%	108	\$12,343,220	4.3%	26.3% - 43.1%
Spinal Fus Exc Cerv W Spinal Curv/Malig/Infec Or 9+ Fus (456 , 457 , 458)	4.0%	59	\$11,077,138	0.8%	2.5% - 5.5%
Cardiac Pacemaker Device Replacement (258 , 259)	31.6%	51	\$10,561,249	5.1%	21.6% - 41.6%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	0.7%	89	\$10,065,744	0.4%	(0.1%) - 1.6%
O.R. Procedures For Obesity (619 , 620 , 621)	6.8%	45	\$9,556,272	1.9%	3.0% - 10.6%
Revision Of Hip Or Knee Replacement (466 , 467 , 468)	1.1%	50	\$9,347,920	0.6%	(0.2%) - 2.4%
Fever (864)	9.9%	51	\$9,288,051	2.2%	5.5% - 14.3%
Extracranial Procedures (037 , 038 , 039)	2.4%	47	\$8,828,038	0.6%	1.2% - 3.7%
Nonspecific CVA & Precerebral Occlusion W/O Infarct (067 , 068)	20.6%	53	\$8,747,252	4.3%	12.1% - 29.1%
Pulmonary Embolism (175 , 176)	1.4%	62	\$8,738,109	0.6%	0.2% - 2.6%
Otitis Media & Uri (152 , 153)	14.6%	47	\$8,154,759	3.5%	7.8% - 21.4%
Tendonitis, Myositis & Bursitis (557 , 558)	5.7%	56	\$7,323,315	2.6%	0.6% - 10.7%
Craniotomy & Endovascular Intracranial Procedures (025 , 026 , 027)	1.0%	54	\$6,976,460	0.5%	0.1% - 1.9%
Postoperative Or Post-Traumatic Infections W O.R. Proc (856 , 857 , 858)	1.0%	112	\$6,830,894	0.3%	0.5% - 1.6%
Carotid Artery Stent Procedure (034 , 035 , 036)	10.0%	53	\$5,515,578	2.7%	4.7% - 15.2%
Kidney & Ureter Procedures For Neoplasm (656 , 657 , 658)	0.5%	50	\$2,378,830	0.4%	(0.2%) - 1.2%
All Type of Services (Incl. Codes Not Listed)	9.9%	12,297	\$11,641,939,780	0.5%	9.0% - 10.8%

Appendix F: 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 this table are based on a minimum of 30 lines in the sample. Some columns and/or rows may not sum correctly due to rounding.

The CERT program is unable to calculate provider compliance improper payment rates for FIs/Part A MACs due to systems limitations.

Table F1: Improper Payment Rates and Improper Payments by Provider Type: Part B

Provider Types Billing to Part B	Improper Payment Rate				Provider Compliance Improper Payment Rate
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Internal Medicine	15.3%	\$1,444,523,349	1,940	13.6% - 17.0%	24.7%
Clinical Laboratory (Billing Independently)	24.4%	\$839,552,581	1,037	19.3% - 29.5%	36.2%
Cardiology	11.8%	\$683,794,717	1,361	9.5% - 14.1%	20.3%
Family Practice	13.7%	\$674,616,342	946	11.7% - 15.6%	23.1%
Diagnostic Radiology	12.3%	\$474,821,046	1,646	9.2% - 15.4%	24.7%
Physical Therapist in Private Practice	18.7%	\$368,566,709	491	14.5% - 22.8%	24.7%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	6.7%	\$313,596,261	729	4.4% - 9.1%	20.3%
Pulmonary Disease	18.1%	\$282,073,136	288	14.9% - 21.3%	22.4%
Chiropractic	51.4%	\$269,887,462	484	45.7% - 57.1%	58.7%
Emergency Medicine	10.9%	\$262,600,153	453	8.9% - 12.8%	17.9%
Orthopedic Surgery	10.0%	\$250,943,248	327	7.1% - 12.9%	20.5%
Ophthalmology	3.9%	\$248,584,694	874	2.4% - 5.5%	11.9%
Vascular Surgery	29.4%	\$241,765,300	72	(5.2%) - 64.0%	37.4%
Gastroenterology	13.7%	\$217,176,271	370	11.1% - 16.3%	23.4%
Neurology	12.4%	\$210,001,615	193	8.2% - 16.6%	21.5%
Nephrology	9.5%	\$207,474,032	297	5.6% - 13.4%	35.9%
Hematology/Oncology	3.6%	\$192,891,803	420	2.3% - 4.9%	17.7%
Psychiatry	22.1%	\$175,488,323	257	18.4% - 25.7%	33.6%
Urology	7.5%	\$153,528,579	259	3.8% - 11.3%	14.6%
General Surgery	10.3%	\$148,648,960	184	7.8% - 12.8%	30.1%
Podiatry	9.6%	\$142,024,932	318	6.4% - 12.8%	29.2%
Independent Diagnostic Testing Facility (IDTF)	13.6%	\$114,388,586	120	(1.2%) - 28.4%	24.7%
Ambulatory Surgical Center	4.0%	\$101,690,042	321	3.5% - 4.5%	18.5%
Nurse Practitioner	7.7%	\$100,010,055	331	6.3% - 9.0%	15.5%
Physical Medicine and Rehabilitation	8.6%	\$94,561,862	172	3.7% - 13.5%	14.2%
Pathology	8.2%	\$94,065,515	220	4.4% - 12.0%	24.2%
All Provider Types With Less Than 30 Claims	4.5%	\$90,683,204	284	3.0% - 5.9%	13.0%
Physician Assistant	12.1%	\$90,033,822	218	9.4% - 14.8%	19.5%
Anesthesiology	5.4%	\$86,769,991	284	3.8% - 7.1%	11.3%

Otolaryngology	8.7%	\$77,183,671	87	6.3% - 11.1%	9.8%
Medical Oncology	4.9%	\$73,138,630	132	3.3% - 6.5%	6.4%
Infectious Disease	13.8%	\$67,059,578	99	11.1% - 16.6%	21.8%
Dermatology	2.4%	\$65,716,527	325	1.7% - 3.2%	7.7%
General Practice	15.8%	\$64,069,763	81	14.2% - 17.4%	30.2%
Radiation Oncology	4.2%	\$63,524,287	319	2.3% - 6.1%	18.9%
Clinical Psychologist	17.8%	\$62,911,725	116	7.8% - 27.9%	24.8%
Optometry	7.0%	\$57,875,452	177	5.5% - 8.6%	20.8%
Neurosurgery	5.1%	\$51,175,358	35	4.2% - 6.1%	13.6%
Occupational Therapist in Private Practice	32.2%	\$48,710,382	39	5.2% - 59.1%	40.2%
Endocrinology	7.0%	\$45,648,943	65	6.1% - 7.9%	9.7%
Rheumatology	6.7%	\$45,411,988	78	6.0% - 7.5%	12.6%
Obstetrics/Gynecology	11.0%	\$43,578,636	71	10.2% - 11.8%	31.9%
Critical Care (Intensivists)	15.0%	\$33,594,926	54	9.8% - 20.2%	22.3%
Clinical Social Worker	21.6%	\$33,066,970	90	13.3% - 29.8%	35.8%
Interventional Pain Management	5.9%	\$20,083,125	61	4.6% - 7.2%	17.8%
Allergy/Immunology	10.9%	\$15,217,949	39	7.6% - 14.2%	12.6%
Geriatric Medicine	8.5%	\$13,338,479	42	7.1% - 9.9%	16.8%
Unassigned	3.5%	\$12,049,390	43	3.0% - 4.1%	2.9%
Certified Registered Nurse Anesthetist (CRNA)	1.4%	\$11,760,933	141	0.3% - 2.4%	4.1%
Interventional Radiology	7.5%	\$11,211,204	52	4.6% - 10.3%	33.5%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	\$0	102	0.0% - 0.0%	16.3%
All Provider Types	10.5%	\$9,491,090,506	17,130	9.5% - 11.5%	21.0%

Table F2: Improper Payment Rates and Improper Payments by Provider Type: DME

Provider Types Billing to DME	Improper Payment Rate				Provider Compliance Improper Payment Rate
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Medical supply company not included in 51, 52, or 53	66.4%	\$3,041,442,673	5,932	64.0% - 68.9%	67.6%
Pharmacy	45.7%	\$1,489,404,304	2,835	38.5% - 52.9%	47.8%
Medical Supply Company with Respiratory Therapist	68.1%	\$526,614,140	1,116	63.3% - 72.8%	69.1%
All Provider Types With Less Than 30 Claims	69.6%	\$138,494,186	219	60.6% - 78.7%	72.2%
Individual prosthetic personnel certified by an accrediting organization	52.7%	\$119,885,764	257	38.2% - 67.3%	55.9%
Individual orthotic personnel certified by an accrediting organization	43.9%	\$92,467,927	251	27.6% - 60.2%	49.1%
Podiatry	74.0%	\$79,396,056	87	62.7% - 85.3%	73.6%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	51.8%	\$69,297,901	167	41.9% - 61.8%	53.6%
Medical supply company with orthotic personnel certified by an accrediting organization	52.2%	\$55,228,608	140	38.3% - 66.0%	53.3%
Orthopedic Surgery	41.0%	\$23,296,623	81	22.3% - 59.6%	43.7%
Unknown Supplier/Provider	73.8%	\$16,007,435	34	49.7% - 97.8%	74.0%
Medical supply company with prosthetic personnel certified by an accrediting organization	33.0%	\$11,355,859	55	15.0% - 51.0%	39.2%
Optometry	12.8%	\$3,491,580	30	3.6% - 22.0%	16.9%
All Provider Types	58.2%	\$5,666,383,056	11,204	54.9% - 61.5%	59.8%

Table F3: Improper Payment Rates and Improper Payments by Provider Type: Part A Excluding Inpatient Hospital PPS

Provider Types Billing to Part A (excluding Inpatient Hospital PPS)	Improper Payment Rate			
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval
HHA	17.3%	\$3,091,653,627	1,393	14.8% - 19.8%
OPPS, Laboratory (an FI), Ambulatory (Billing an FI)	5.4%	\$2,632,628,598	2,668	4.2% - 6.7%
SNF	7.4%	\$2,579,784,006	1,287	5.4% - 9.5%
Hospice	7.9%	\$1,054,987,989	479	4.9% - 10.8%
ESRD	7.8%	\$813,485,526	409	5.3% - 10.3%
Inpatient Rehabilitation Hospitals	19.2%	\$438,440,841	43	8.6% - 29.8%
Inpatient Rehab Unit	15.7%	\$411,673,189	51	7.1% - 24.2%
Critical Access Hospital (CAH) Outpatient Services	4.9%	\$215,880,132	325	3.0% - 6.8%
RHCs	6.3%	\$60,707,386	379	1.9% - 10.8%
All Codes With Less Than 30 Claims	6.6%	\$45,358,523	19	(5.7%) - 18.9%
Inpatient Critical Access Hospital	1.7%	\$40,514,730	103	0.1% - 3.2%
Outpatient Rehab Facility (ORF)	5.9%	\$28,474,746	89	1.6% - 10.3%
FQHC	2.0%	\$13,566,412	273	0.3% - 3.6%
Comprehensive Outpatient Rehab Facility (CORF)	7.8%	\$1,382,956	42	0.3% - 15.4%
Non PPS Short Term Hospital Inpatient	0.0%	\$0	36	0.0% - 0.0%
Overall	8.2%	\$11,428,538,662	7,596	7.2% - 9.1%

Table F4: Improper Payment Rates and Improper Payments by Provider Type: Part A Inpatient Hospital PPS

Provider Types Billing to Part A Inpatient Hospital PPS	Improper Payment Rate			
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval
DRG Short Term	9.7%	\$10,503,692,021	12,118	8.8% - 10.6%
Other FI Service Types	14.4%	\$571,510,211	128	7.7% - 21.1%
DRG Long Term	10.4%	\$566,737,548	51	4.3% - 16.5%
Overall	9.9%	\$11,641,939,780	12,297	9.0% - 10.8%

Appendix G – Improper Payment Rates and Type of Error by Provider Type for Each Claim Type

Some columns and/or rows may not sum correctly due to rounding.

Table G1: Improper Payment Rates by Provider Type and Type of Error: Part B

Provider Types Billed to Part B	Improper Payment Rate	Number of Claims in Sample	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Chiropractic	51.4%	484	0.5%	93.8%	4.6%	0.3%	0.8%
Occupational Therapist in Private Practice	32.2%	39	0.0%	97.4%	0.0%	2.6%	0.0%
Vascular Surgery	29.4%	72	85.5%	5.5%	6.9%	2.1%	0.0%
Clinical Laboratory (Billing Independently)	24.4%	1,037	0.5%	95.3%	3.8%	0.5%	0.0%
Psychiatry	22.1%	257	0.0%	69.9%	0.0%	30.1%	0.0%
Clinical Social Worker	21.6%	90	0.0%	100.0%	0.0%	0.0%	0.0%
Physical Therapist in Private Practice	18.7%	491	0.8%	91.0%	0.6%	5.4%	2.2%
Pulmonary Disease	18.1%	288	0.4%	61.3%	0.0%	38.3%	0.0%
Clinical Psychologist	17.8%	116	3.9%	93.1%	0.0%	1.7%	1.2%
General Practice	15.8%	81	12.5%	52.0%	0.0%	35.5%	0.0%
Internal Medicine	15.3%	1,940	4.1%	53.4%	1.7%	40.4%	0.5%
Critical Care (Intensivists)	15.0%	54	9.5%	64.1%	0.0%	26.5%	0.0%
Infectious Disease	13.8%	99	0.0%	32.2%	0.0%	67.8%	0.0%
Gastroenterology	13.7%	370	3.2%	54.8%	0.0%	41.2%	0.7%
Family Practice	13.7%	946	1.5%	59.5%	0.4%	36.0%	2.6%
Independent Diagnostic Testing Facility (IDTF)	13.6%	120	0.0%	37.9%	62.1%	0.0%	0.0%
Neurology	12.4%	193	0.0%	52.2%	0.0%	47.2%	0.7%
Diagnostic Radiology	12.3%	1,646	0.5%	97.6%	0.5%	1.0%	0.5%
Physician Assistant	12.1%	218	0.0%	55.7%	0.0%	44.3%	0.0%
Cardiology	11.8%	1,361	1.2%	63.3%	3.4%	31.6%	0.5%
Obstetrics/Gynecology	11.0%	71	0.6%	18.6%	0.0%	80.7%	0.0%
Allergy/Immunology	10.9%	39	0.0%	67.2%	4.4%	28.4%	0.0%
Emergency Medicine	10.9%	453	6.3%	23.1%	0.0%	70.7%	0.0%
General Surgery	10.3%	184	0.0%	65.8%	0.0%	34.2%	0.0%
Orthopedic Surgery	10.0%	327	0.0%	54.8%	9.3%	25.0%	10.8%
Podiatry	9.6%	318	5.4%	72.7%	0.5%	21.4%	0.0%
Nephrology	9.5%	297	0.8%	65.4%	0.0%	33.8%	0.0%
Otolaryngology	8.7%	87	1.1%	53.0%	0.0%	45.9%	0.0%
Physical Medicine and Rehabilitation	8.6%	172	0.0%	54.5%	0.0%	42.0%	3.5%
Geriatric Medicine	8.5%	42	0.0%	49.3%	0.0%	50.7%	0.0%
Pathology	8.2%	220	12.6%	85.2%	1.8%	0.4%	0.0%
Nurse Practitioner	7.7%	331	8.1%	46.4%	2.5%	42.6%	0.3%
Urology	7.5%	259	0.3%	68.6%	0.7%	30.3%	0.0%
Interventional Radiology	7.5%	52	0.0%	100.0%	0.0%	0.0%	0.0%
Optometry	7.0%	177	30.2%	58.8%	0.3%	10.7%	0.0%

Provider Types Billed to Part B	Improper Payment Rate	Number of Claims in Sample	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Endocrinology	7.0%	65	0.0%	36.7%	1.3%	62.0%	0.0%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	6.7%	729	0.1%	61.8%	31.7%	6.4%	0.0%
Rheumatology	6.7%	78	0.0%	81.0%	0.0%	19.0%	0.0%
Interventional Pain Management	5.9%	61	24.9%	32.4%	2.7%	40.0%	0.0%
Anesthesiology	5.4%	284	0.0%	69.9%	0.5%	28.5%	1.2%
Neurosurgery	5.1%	35	0.0%	70.5%	0.0%	29.5%	0.0%
Medical Oncology	4.9%	132	0.0%	86.8%	0.9%	12.3%	0.0%
All Provider Types With Less Than 30 Claims	4.5%	284	0.0%	63.6%	1.8%	33.3%	1.3%
Radiation Oncology	4.2%	319	0.7%	72.8%	2.0%	23.6%	0.9%
Ambulatory Surgical Center	4.0%	321	0.0%	99.8%	0.0%	0.2%	0.0%
Ophthalmology	3.9%	874	2.3%	84.4%	0.0%	11.4%	1.8%
Hematology/Oncology	3.6%	420	3.8%	59.6%	5.5%	31.0%	0.0%
Unassigned	3.5%	43	0.0%	100.0%	0.0%	0.0%	0.0%
Dermatology	2.4%	325	7.2%	30.5%	19.8%	42.5%	0.0%
Certified Registered Nurse Anesthetist (CRNA)	1.4%	141	0.0%	91.8%	0.0%	8.2%	0.0%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	102	N/A	N/A	N/A	N/A	N/A
All Provider Types	10.5%	17,130	4.3%	65.5%	3.6%	25.7%	0.9%

Table G2: Improper Payment Rates by Provider Type and Type of Error: DME

Provider Types Billed to DME	Improper Payment Rate	Number of Claims in Sample	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Podiatry	74.0%	87	0.0%	99.1%	0.3%	0.7%	0.0%
Unknown Supplier/Provider	73.8%	34	5.1%	94.9%	0.0%	0.0%	0.0%
All Provider Types With Less Than 30 Claims	69.6%	219	0.0%	84.5%	0.0%	0.0%	15.5%
Medical Supply Company with Respiratory Therapist	68.1%	1,116	1.0%	95.1%	2.8%	0.0%	1.1%
Medical supply company not included in 51, 52, or 53	66.4%	5,932	0.6%	94.7%	3.2%	0.2%	1.4%
Individual prosthetic personnel certified by an accrediting organization	52.7%	257	0.1%	94.5%	4.6%	0.0%	0.9%
Medical supply company with orthotic personnel certified by an accrediting organization	52.2%	140	0.0%	97.7%	0.6%	0.1%	1.6%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	51.8%	167	0.0%	100.0%	0.0%	0.0%	0.0%
Pharmacy	45.7%	2,835	0.5%	96.4%	2.3%	0.1%	0.6%
Individual orthotic personnel certified by an accrediting organization	43.9%	251	0.0%	88.4%	11.4%	0.0%	0.2%
Orthopedic Surgery	41.0%	81	0.0%	63.3%	0.0%	0.0%	36.7%
Medical supply company with prosthetic personnel certified by an accrediting organization	33.0%	55	0.0%	100.0%	0.0%	0.0%	0.0%
Optometry	12.8%	30	0.0%	100.0%	0.0%	0.0%	0.0%
All Provider Types	58.2%	11,204	0.5%	94.9%	2.9%	0.2%	1.6%

**Table G3: Improper Payment Rates by Provider Type and Type of Error: Part A
Excluding Inpatient Hospital PPS**

Provider Types Billed to Part A excluding Inpatient Hospital PPS	Improper Payment Rate	Number of Claims in Sample	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Inpatient Rehabilitation Hospitals	19.2%	43	0.0%	16.8%	83.2%	0.0%	0.0%
HHA	17.3%	1,393	1.7%	81.4%	15.8%	1.1%	0.0%
Inpatient Rehab Unit	15.7%	51	0.0%	100.0%	0.0%	0.0%	0.0%
Hospice	7.9%	479	0.0%	64.3%	34.7%	1.0%	0.0%
Comprehensive Outpatient Rehab Facility (CORF)	7.8%	42	0.0%	80.9%	19.1%	0.0%	0.0%
ESRD	7.8%	409	0.1%	97.1%	0.0%	1.9%	0.9%
SNF	7.4%	1,287	0.0%	75.7%	4.1%	13.8%	6.4%
All Codes With Less Than 30 Claims	6.6%	19	0.0%	100.0%	0.0%	0.0%	0.0%
RHCs	6.3%	379	0.0%	100.0%	0.0%	0.0%	0.0%
Outpatient Rehab Facility (ORF)	5.9%	89	44.6%	53.5%	0.0%	1.9%	0.0%
OPPS, Laboratory (an FI), Ambulatory (Billing an FI)	5.4%	2,668	1.7%	85.6%	3.0%	6.5%	3.2%
Critical Access Hospital (CAH) Outpatient Services	4.9%	325	0.0%	95.5%	0.0%	4.5%	0.0%
FQHC	2.0%	273	0.0%	97.0%	0.0%	0.0%	3.0%
Inpatient Critical Access Hospital	1.7%	103	0.0%	100.0%	0.0%	0.0%	0.0%
Non PPS Short Term Hospital Inpatient	0.0%	36	N/A	N/A	N/A	N/A	N/A
All Provider Types	8.2%	7,596	1.0%	79.2%	12.3%	5.2%	2.3%

Table G4: Improper Payment Rates by Provider Type and Type of Error: Part A Inpatient Hospital PPS

Provider Types Billed to Part A Inpatient Hospital PPS	Improper Payment Rate	Number of Claims in Sample	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Other FI Service Types	14.4%	128	0.0%	82.3%	16.1%	1.6%	0.0%
DRG Long Term	10.4%	51	0.0%	0.0%	80.5%	19.5%	0.0%
DRG Short Term	9.7%	12,118	0.0%	5.7%	73.5%	19.8%	1.0%
All Provider Types	9.9%	12,297	0.0%	9.1%	71.0%	18.9%	0.9%

Appendix H: Coding Information

Table H1: Problem Code: CPT Code 99233

Fiscal Year	Number of Lines Reviewed	Number of Lines Questioned	Percent of Lines in Error
1996	217	115	53.0%
1997	416	128	30.8%
1998	457	114	24.9%
1999	187	102	54.5%
2000	449	220	49.0%
2001	338	142	42.0%
2002	228	174	76.3%
2003	709	435	61.4%
2004	768	391	50.9%
2005	1,079	474	43.9%
2006	1,102	440	39.9%
2007	1,157	532	46.0%
2008	1,032	489	47.4%
2009	882	433	49.1%
2010	697	366	52.5%
2011	611	316	51.7%
2012	992	586	59.1%
Nov 2013	1,255	626	49.9%

Table H2: Problem Code: CPT Code 99214

Fiscal Year	Number of Lines Reviewed	Number of Lines Questioned	Percent of Lines in Error
1996	140	54	38.6%
1997	234	86	36.8%
1998	168	63	37.5%
1999	143	81	56.6%
2000	191	71	37.2%
2001	214	67	31.3%
2002	104	24	23.1%
2003	2,798	687	24.6%
2004	3,250	589	18.1%
2005	4,436	648	14.6%
2006	4,491	609	13.6%
2007	4,287	602	14.0%
2008	4,301	608	14.1%
2009	3,342	617	18.5%
2010	2,829	569	20.1%
2011	2,316	404	17.4%
2012	1,403	260	18.5%
Nov 2013	922	111	12.0%

Table H3: Problem Code: CPT Code 99232

Fiscal Year	Number of Lines Reviewed	Number of Lines Questioned	Percent of Lines in Error
1996	597	266	44.6%
1997	1,159	350	30.2%
1998	911	181	19.9%
1999	837	279	33.3%
2000	881	270	30.6%
2001	964	146	15.1%
2002	488	179	36.7%
2003	2,213	855	38.6%
2004	2,485	754	30.3%
2005	3,194	555	17.4%
2006	3,236	295	9.1%
2007	3,164	393	12.4%
2008	2,728	316	11.6%
2009	2,180	326	15.0%
2010	1,693	290	17.1%
2011	1,600	240	15.0%
2012	1,490	221	14.8%
Nov 2013	1,201	176	14.7%

Table H4 provides information on the impact of one-level disagreement between Carriers/Part B MACs and providers when coding E&M services.

Table H4: Impact of One Level E&M (Top 20)

Final E & M Codes	Incorrect Coding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Subsequent hospital care (99233)	12.3%	\$205,144,920	11.1% - 13.5%
Office/outpatient visit est (99214)	3.1%	\$200,572,848	2.5% - 3.8%
Emergency dept visit (99285)	10.0%	\$135,771,462	7.8% - 12.2%
Office/outpatient visit est (99215)	11.1%	\$105,833,587	8.9% - 13.2%
Office/outpatient visit new (99204)	8.5%	\$93,202,254	5.7% - 11.4%
Initial hospital care (99222)	9.6%	\$79,681,628	7.8% - 11.4%
Office/outpatient visit est (99213)	1.2%	\$67,461,776	0.6% - 1.9%
Office/outpatient visit new (99203)	8.3%	\$67,058,229	5.6% - 10.9%
Subsequent hospital care (99232)	2.2%	\$58,865,063	1.4% - 2.9%
Initial hospital care (99223)	2.6%	\$45,958,837	1.8% - 3.4%
Hospital discharge day (99239)	8.1%	\$26,334,168	6.5% - 9.8%
Office/outpatient visit new (99205)	5.3%	\$25,311,654	3.5% - 7.1%
Office/outpatient visit est (99212)	4.3%	\$24,017,861	1.8% - 6.8%
Subsequent hospital care (99231)	6.3%	\$22,292,631	4.0% - 8.6%
Nursing fac care subseq (99310)	12.8%	\$15,626,173	10.2% - 15.5%
Emergency dept visit (99283)	7.8%	\$13,792,993	3.2% - 12.4%
Nursing fac care subseq (99309)	2.8%	\$12,371,518	1.3% - 4.2%
Nursing fac care subseq (99308)	1.6%	\$8,707,854	0.3% - 2.9%
Nursing facility care init (99306)	4.9%	\$7,952,377	2.1% - 7.8%
Emergency dept visit (99284)	1.1%	\$5,458,277	(0.4%) - 2.6%
All Other Codes	0.1%	\$39,283,361	0.0% - 0.1%
Overall	1.4%	\$1,260,699,470	1.3% - 1.5%

Tables H5 through H8 list the top twenty services with the highest dollars in error due to upcoding. Upcoding refers to billing a higher level service or a service with a higher payment than is supported by the medical record documentation. All estimates in these tables are based on a minimum of 30 claims in the sample. Data in these tables are sorted in descending order by projected improper payments.

Table H5: Type of Services with Upcoding Errors: Part B

Service Type Billed to Part B (BETOS)	Upcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Hospital visit - initial	21.1%	\$595,362,960	19.2% - 22.9%
Office visits - new	15.6%	\$409,028,745	13.3% - 18.0%
Office visits - established	2.9%	\$385,180,312	2.4% - 3.3%
Hospital visit - subsequent	6.3%	\$347,955,424	5.6% - 7.1%
Emergency room visit	9.0%	\$184,572,372	7.1% - 10.9%
Nursing home visit	7.1%	\$126,796,671	5.9% - 8.3%
Hospital visit - critical care	10.9%	\$95,139,975	7.9% - 13.9%
Minor procedures - other (Medicare fee schedule)	0.6%	\$24,557,339	0.3% - 1.0%
Dialysis services (Medicare Fee Schedule)	3.0%	\$24,536,830	1.4% - 4.6%
Home visit	6.9%	\$21,334,135	2.4% - 11.4%
Ambulance	0.4%	\$19,918,869	0.2% - 0.7%
Lab tests - blood counts	3.0%	\$8,774,526	1.9% - 4.2%
Ambulatory procedures - skin	0.3%	\$5,698,287	0.2% - 0.4%
Oncology - radiation therapy	0.4%	\$5,404,090	(0.4%) - 1.2%
Other drugs	0.1%	\$5,246,597	(0.0%) - 0.2%
Specialist - ophthalmology	0.2%	\$4,554,052	(0.1%) - 0.5%
Specialist - psychiatry	0.5%	\$4,225,622	(0.0%) - 1.0%
Standard imaging - musculoskeletal	0.5%	\$2,997,078	(0.3%) - 1.3%
Minor procedures - skin	0.2%	\$2,321,525	(0.0%) - 0.4%
Chiropractic	0.3%	\$1,775,560	0.2% - 0.5%
All Other Codes	0.1%	\$20,181,291	(0.0%) - 0.1%
Overall	2.5%	\$2,295,562,261	2.3% - 2.7%

Table H6: Type of Services with Upcoding Errors: DME

Service Type Billed to DME (HCPCS)	Upcoding Errors		
	Improper Payment Rate	Projected Improper Payments	Improper Payment Rate
Lower Limb Orthoses	1.4%	\$3,563,184	(1.0%) - 3.8%
Glucose Monitor	0.3%	\$3,161,577	(0.0%) - 0.5%
Hospital Beds/Accessories	0.7%	\$1,343,277	(0.7%) - 2.1%
Infusion Pumps & Related Drugs	0.0%	\$195,657	(0.0%) - 0.1%
Wheelchairs Seating	0.2%	\$85,677	(0.2%) - 0.5%
CPM Device	0.3%	\$65,936	0.3% - 0.4%
Wheelchairs Options/Accessories	0.0%	\$21,452	(0.0%) - 0.0%
Overall	0.1%	\$8,436,760	0.0% - 0.2%

Table H7: Type of Services with Upcoding Errors: Part A Excluding Inpatient Hospital PPS

Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Upcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
SNF Inpatient	1.0%	\$336,983,018	0.5% - 1.5%
Hospital Outpatient	0.2%	\$73,121,460	(0.0%) - 0.3%
Home Health	0.1%	\$18,920,073	0.0% - 0.2%
Clinic ESRD	0.1%	\$10,663,863	(0.1%) - 0.3%
Nonhospital based hospice	0.1%	\$10,439,335	(0.1%) - 0.2%
Critical Access Hospital	0.2%	\$6,989,654	0.0% - 0.3%
Hospital Other Part B	0.5%	\$2,803,783	0.1% - 0.8%
SNF Inpatient Part B	0.0%	\$807,488	(0.0%) - 0.1%
All Codes With Less Than 30 Claims	0.0%	\$270,687	(0.0%) - 0.1%
Clinic OPT	0.1%	\$259,107	(0.1%) - 0.2%
Hospital Inpatient Part B	0.0%	\$120,512	0.0% - 0.0%
Overall	0.3%	\$461,378,980	0.2% - 0.5%

Table H8: Type of Services with Upcoding Errors: Part A Inpatient Hospital PPS

Service Type Billed to Part A Inpatient Hospital PPS (DRG Group)	Upcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Stomach, Esophageal & Duodenal Proc (326 , 327 , 328)	23.7%	\$146,199,756	23.0% - 24.3%
Combined Anterior/Posterior Spinal Fusion (453 , 454 , 455)	9.4%	\$92,539,525	9.1% - 9.7%
Major Chest Procedures (163 , 164 , 165)	8.9%	\$67,672,444	4.7% - 13.2%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	1.7%	\$50,466,395	(0.0%) - 3.5%
Extensive O.R. Procedure Unrelated To Principal Diagnosis (981 , 982 , 983)	2.6%	\$49,353,393	1.6% - 3.7%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	0.7%	\$35,748,755	(0.0%) - 1.5%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	1.2%	\$25,772,111	0.8% - 1.5%
Major Cardiovasc Procedures (237 , 238)	1.5%	\$21,829,456	0.9% - 2.0%
Major Gastrointestinal Disorders & Peritoneal Infections (371 , 372 , 373)	2.6%	\$15,862,030	(2.1%) - 7.3%
Kidney & Urinary Tract Infections (689 , 690)	0.9%	\$13,806,080	0.3% - 1.4%
Renal Failure (682 , 683 , 684)	0.4%	\$10,977,887	(0.2%) - 1.1%
Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	0.6%	\$10,967,407	0.5% - 0.8%
Laparoscopic Cholecystectomy W/O C.D.E. (417 , 418 , 419)	1.3%	\$9,871,596	(1.2%) - 3.9%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	0.7%	\$9,181,563	0.6% - 0.8%
Other Digestive System Diagnoses (393 , 394 , 395)	0.8%	\$7,929,961	0.6% - 1.0%
G.I. Obstruction (388 , 389 , 390)	1.0%	\$7,343,659	0.8% - 1.2%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	0.5%	\$6,746,342	(0.4%) - 1.3%
Wnd Debrid & Skn Grft Exc Hand, For Musculo-Conn Tiss Dis (463 , 464 , 465)	4.1%	\$6,467,363	1.7% - 6.5%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	0.4%	\$5,677,581	0.0% - 0.8%
Heart Failure & Shock (291 , 292 , 293)	0.2%	\$5,625,946	(0.2%) - 0.5%
All Other Codes	0.6%	\$528,719,268	0.3% - 1.0%
Overall	1.0%	\$1,128,758,519	0.5% - 1.4%

Appendix I: Overpayments

Tables I1 through I4 provide for each claim type the service-specific overpayment rates. The tables are sorted in descending order by projected improper payments. Some columns and/or rows may not sum correctly due to rounding.

Table I1: Service Specific Overpayment Rates: Part B

Service Billed to Part B (BETOS)	Number of Claims in Sample	Number of Lines in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
All Codes With Less Than 30 Claims	5,222	8,395	\$68,092	\$913,573	\$2,685,574,806	9.3%
Initial hospital care (99223)	555	558	\$29,262	\$98,064	\$524,941,504	29.6%
Subsequent hospital care (99233)	854	1,273	\$28,662	\$116,546	\$407,605,071	24.4%
Office/outpatient visit est (99214)	920	922	\$5,258	\$83,872	\$398,150,160	6.2%
Subsequent hospital care (99232)	717	1,228	\$10,866	\$82,188	\$345,470,083	12.6%
Office/outpatient visit new (99204)	104	104	\$3,353	\$15,029	\$240,648,092	22.0%
Office/outpatient visit est (99215)	151	151	\$4,195	\$18,147	\$224,870,314	23.5%
Therapeutic exercises (97110)	372	448	\$4,604	\$21,718	\$223,961,260	21.2%
Initial hospital care (99222)	172	173	\$5,245	\$20,895	\$204,849,141	24.7%
Emergency dept visit (99285)	187	187	\$4,322	\$29,327	\$198,141,852	14.6%
Office/outpatient visit est (99213)	546	550	\$1,321	\$34,267	\$193,342,979	3.6%
Critical care first hour (99291)	233	288	\$13,788	\$60,311	\$191,057,625	22.8%
BLS (A0428)	160	175	\$4,858	\$32,135	\$170,681,263	14.9%
Chiropractic manipulation (98941)	244	294	\$4,247	\$8,416	\$158,118,569	49.7%
Office/outpatient visit new (99205)	99	99	\$5,137	\$17,539	\$139,464,764	29.2%
Manual therapy (97140)	305	357	\$3,196	\$11,630	\$114,512,297	26.1%
Office/outpatient visit new (99203)	105	105	\$1,104	\$10,024	\$89,441,178	11.1%
Hospital discharge day (99239)	186	186	\$4,596	\$18,110	\$88,334,530	27.2%
Drain/inject joint/bursa (20610)	134	145	\$1,329	\$9,704	\$76,783,581	20.6%
ESRD srv 4 visits p mo 20+ (90960)	103	104	\$4,382	\$28,790	\$76,724,326	15.1%
All Other Codes	11,190	18,748	\$211,690	\$3,533,209	\$2,589,559,089	7.8%
Combined	17,130	34,490	\$419,506	\$5,163,493	\$9,342,232,483	10.3%

Table I2: Service Specific Overpayment Rates: DME

Service Billed to DME (HCPCS)	Number of Claims in Sample	Number of Lines in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
Oxygen concentrator (E1390)	1,212	1,262	\$136,312	\$181,075	\$983,768,125	75.6%
All Codes With Less Than 30 Claims	2,147	3,235	\$545,968	\$1,053,401	\$867,058,104	37.4%
Blood glucose/reagent strips (A4253)	1,131	1,148	\$85,298	\$114,282	\$791,786,761	75.1%
PWC gp 2 std cap chair (K0823)	734	747	\$181,940	\$212,803	\$201,643,982	85.4%
Hosp bed semi-electric w/matt (E0260)	364	386	\$28,235	\$34,055	\$137,106,877	84.1%
Tacrolimus oral per 1 MG (J7507)	70	71	\$11,920	\$26,692	\$88,099,443	43.4%
Cont airway pressure device (E0601)	118	126	\$4,255	\$8,732	\$84,740,816	48.8%
Lancets per box (A4259)	607	615	\$8,409	\$11,030	\$82,958,405	76.3%
Portable gaseous O2 (E0431)	525	567	\$9,876	\$13,516	\$78,011,911	73.2%
Enteral feed supp pump per d (B4035)	90	90	\$11,685	\$18,809	\$69,222,164	61.7%
Diab shoe for density insert (A5500)	82	90	\$7,384	\$9,580	\$65,194,062	78.3%
Nasal application device (A7034)	78	79	\$4,808	\$8,022	\$59,780,922	56.8%
Budesonide non-comp unit (J7626)	136	141	\$13,136	\$33,672	\$59,537,844	39.0%
CPAP full face mask (A7030)	62	62	\$5,982	\$9,206	\$53,974,803	66.0%
Lightweight wheelchair (K0003)	67	69	\$4,291	\$4,606	\$53,344,568	95.5%
Standard wheelchair (K0001)	74	79	\$2,736	\$3,016	\$52,628,676	92.5%
High strength ltwt whlchr (K0004)	80	91	\$7,419	\$9,046	\$51,690,372	90.9%
LSO sag-coro rigid frame pre (L0631)	62	62	\$28,990	\$48,450	\$51,310,493	60.4%
Multi den insert direct form (A5512)	45	48	\$5,649	\$6,623	\$49,722,593	86.0%
Disp fee inhal drugs/30 days (Q0513)	424	426	\$7,062	\$13,398	\$47,738,353	53.1%
All Other Codes	7,274	13,747	\$3,982,290	\$7,804,614	\$1,736,897,848	55.4%
Combined	11,204	23,141	\$5,093,646	\$9,624,629	\$5,666,217,120	58.2%

Table I3: Service Specific Overpayment Rates: Part A Excluding Inpatient Hospital PPS

Service Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Number of Claims in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
Home Health	1,379	\$681,386	\$3,732,975	\$3,077,013,675	17.3%
SNF Inpatient	1,035	\$432,645	\$5,727,305	\$2,466,092,847	7.7%
Hospital Outpatient	2,408	\$52,014	\$1,055,818	\$2,295,110,316	5.0%
Nonhospital based hospice	399	\$105,178	\$1,291,512	\$1,027,433,960	8.3%
Hospital Inpatient (Part A)	246	\$332,124	\$3,038,239	\$934,624,319	11.0%
Clinic ESRD	409	\$88,349	\$1,104,204	\$809,039,480	7.8%
Critical Access Hospital	325	\$6,012	\$125,573	\$211,607,125	4.8%
Hospital Other Part B	175	\$1,532	\$7,691	\$129,522,094	21.2%
SNF Inpatient Part B	200	\$5,144	\$150,597	\$82,732,453	3.6%
Clinical Rural Health	379	\$1,580	\$40,184	\$60,707,386	6.3%
Hospital Inpatient Part B	81	\$5,695	\$58,656	\$57,869,286	10.6%
Clinic OPT	89	\$1,471	\$30,441	\$28,195,134	5.9%
Hospital based hospice	80	\$11,458	\$232,777	\$27,554,029	2.5%
Federally Qualified Health Centers (Effective April 1, 2010)	270	\$955	\$28,306	\$13,566,412	2.0%
SNF Outpatient	52	\$1,818	\$28,769	\$12,437,025	4.9%
Clinic CORF	42	\$1,299	\$15,913	\$1,382,956	7.8%
Community Mental Health Centers	6	\$129	\$1,866	\$1,362,965	2.5%
Home Health (Part B Only)	14	\$31	\$1,331	\$270,687	1.2%
All Other Codes	7	\$0	\$28,838	\$0	0.0%
Combined	7,596	\$1,728,820	\$16,700,995	\$11,236,522,148	8.0%

Table I4: Service Specific Overpayment Rates: Part A Inpatient Hospital PPS

Service Billed to Part A Inpatient Hospital PPS (MS-DRG Groups)	Number of Claims in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
All Codes With Less Than 30 Claims	1,279	\$1,129,633	\$18,921,232	\$4,126,374,991	5.9%
Psychoses (885)	109	\$146,516	\$1,023,658	\$504,899,646	14.2%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	49	\$82,270	\$203,546	\$365,676,586	41.5%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O Mcc (247)	195	\$613,367	\$2,436,954	\$328,942,259	24.4%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	1,196	\$945,039	\$15,367,937	\$316,736,413	6.3%
Cardiac Defibrillator Implant W/O Cardiac Cath W/O Mcc (227)	480	\$7,948,798	\$16,432,117	\$284,122,663	47.7%
Chest Pain (313)	52	\$115,244	\$174,958	\$249,459,926	60.8%
Renal Failure W Mcc (682)	35	\$58,878	\$364,169	\$197,061,714	14.8%
Circulatory Disorders Except Ami, W Card Cath W/O Mcc (287)	231	\$376,500	\$1,571,674	\$175,227,950	23.7%
Permanent Cardiac Pacemaker Implant W Cc (243)	355	\$2,003,938	\$5,860,852	\$173,370,519	33.9%
Permanent Cardiac Pacemaker Implant W/O Cc/Mcc (244)	484	\$2,762,014	\$6,410,103	\$161,705,206	42.3%
Medical Back Problems W/O Mcc (552)	53	\$123,277	\$289,831	\$156,836,994	44.0%
Heart Failure & Shock W Cc (292)	52	\$36,171	\$321,345	\$136,714,795	11.0%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	207	\$56,684	\$2,633,331	\$130,357,649	3.0%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes W/O Mcc (641)	47	\$37,648	\$210,349	\$125,341,257	18.1%
Spinal Fusion Except Cervical W/O Mcc (460)	480	\$845,015	\$11,909,874	\$110,515,217	7.2%
Other Vascular Procedures W/O Cc/Mcc (254)	50	\$176,744	\$565,308	\$106,566,281	30.6%
Back & Neck Proc Exc Spinal Fusion W/O Cc/Mcc (491)	53	\$139,862	\$347,254	\$101,900,837	37.2%
Perc Cardiovasc Proc W/O Coronary Artery Stent W/O Mcc (251)	311	\$1,107,693	\$4,064,328	\$101,050,414	26.8%
Syncope & Collapse (312)	50	\$37,383	\$223,313	\$100,623,616	17.7%
All Other Codes	6,529	\$14,015,366	\$73,748,308	\$2,605,871,015	11.1%
Combined	12,297	\$32,758,041	\$163,080,442	\$10,559,355,948	9.0%

Table I5: Service Specific Overpayment Rates: All CERT

Service Billed to Part B/DME/Part A including Inpatient Hospital	Number of Claims in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
All	48,227	\$40,000,013	\$194,569,559	\$36,804,327,699	10.3%

Appendix J: 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. Some columns and/or rows may not sum correctly due to rounding. All estimates in these tables are based on a minimum of 30 claims in the sample with at least one claim underpaid.

Table J1: Service Specific Underpayment Rates: Part B

Service Billed to Part B (BETOS)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
Office/outpatient visit est (99213)	546	550	\$242	\$34,267	\$38,541,329	0.7%
Office/outpatient visit est (99212)	175	176	\$390	\$6,291	\$26,390,374	4.7%
Subsequent hospital care (99231)	184	321	\$831	\$9,858	\$25,577,884	7.2%
Office/outpatient visit est (99214)	920	922	\$160	\$83,872	\$11,904,222	0.2%
Emergency dept visit (99283)	100	100	\$384	\$5,305	\$10,627,333	6.0%
All Codes With Less Than 30 Claims	5,222	8,395	\$202	\$913,573	\$10,584,771	0.0%
Initial hospital care (99222)	172	173	\$148	\$20,895	\$5,877,976	0.7%
Office/outpatient visit new (99203)	105	105	\$57	\$10,024	\$4,700,853	0.6%
Subsequent hospital care (99232)	717	1,228	\$72	\$82,188	\$2,493,045	0.1%
Office/outpatient visit est (99211)	148	152	\$81	\$2,377	\$2,166,659	1.9%
Neuromuscular reeducation (97112)	123	148	\$40	\$4,929	\$2,144,291	1.2%
Nursing fac care subseq (99307)	47	55	\$39	\$1,855	\$1,932,546	1.7%
Nursing fac care subseq (99308)	115	140	\$20	\$7,837	\$1,488,162	0.3%
Regadenoson injection (J2785)	86	86	\$158	\$15,788	\$1,226,692	1.1%
Tx/proph/dg addl seq iv inf (96367)	122	123	\$121	\$5,110	\$1,168,215	2.0%
Ther/proph/diag inj sc/im (96372)	231	238	\$22	\$5,063	\$785,340	0.4%
Triamcinolone acet inj NOS (J3301)	60	62	\$20	\$436	\$625,166	3.3%
Nursing fac care subseq (99309)	105	116	\$6	\$8,075	\$385,094	0.1%
Nursing facility care init (99306)	100	100	\$7	\$13,779	\$85,528	0.1%
Complete cbc automated (85027)	40	41	\$3	\$293	\$83,516	0.3%
All Other Codes	12,713	21,259	\$34	\$3,931,677	\$69,025	0.0%
Combined	17,130	34,490	\$3,036	\$5,163,493	\$148,858,023	0.2%

Table J2: Service Specific Underpayment Rates: DME

Service Billed to DMEs (HCPCS)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
Vol control vent invasiv int (E0450)	50	54	\$474	\$47,385	\$165,936	1.2%
All Other Codes	11,156	23,087	\$0	\$9,577,245	\$0	0.0%
Combined	11,204	23,141	\$474	\$9,624,629	\$165,936	0.0%

Table J3: Service Specific Underpayment Rates: Part A Excluding Inpatient Hospital PPS

Service Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
Hospital Outpatient	2,408	2,408	\$3,836	\$1,055,818	\$148,445,159	0.3%
SNF Inpatient	1,035	1,035	\$3,193	\$5,727,305	\$15,899,649	0.0%
Home Health	1,379	1,379	\$3,224	\$3,732,975	\$14,369,265	0.1%
Clinic ESRD	409	409	\$498	\$1,104,204	\$4,446,046	0.0%
Critical Access Hospital	325	325	\$106	\$125,573	\$4,273,007	0.1%
SNF Inpatient Part B	200	200	\$162	\$150,597	\$2,622,032	0.1%
Hospital Other Part B	175	175	\$15	\$7,691	\$1,273,962	0.2%
Hospital Inpatient Part B	81	81	\$36	\$58,656	\$407,781	0.1%
Clinic OPT	89	89	\$33	\$30,441	\$279,613	0.1%
All Other Codes	1,495	1,495	\$0	\$4,707,735	\$0	0.0%
Combined	7,596	7,596	\$11,102	\$16,700,995	\$192,016,514	0.1%

Table J4: Service Specific Underpayment Rates: Part A Inpatient Hospital PPS

Service Billed to Part A Inpatient Hospital PPS (MS-DRG Groups)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
All Codes With Less Than 30 Claims	1,279	1,279	\$130,147	\$18,921,232	\$486,074,300	0.7%
Renal Failure W Cc (683)	45	45	\$13,109	\$298,867	\$47,400,853	4.4%
G.I. Hemorrhage W Cc (378)	47	47	\$8,937	\$332,104	\$33,372,410	2.7%
Intracranial Hemorrhage Or Cerebral Infarction W/O Cc/Mcc (066)	45	45	\$24,020	\$245,004	\$30,818,990	9.8%
Chronic Obstructive Pulmonary Disease W/O Cc/Mcc (192)	45	45	\$9,747	\$201,338	\$25,875,794	5.9%
Kidney & Urinary Tract Infections W/O Mcc (690)	52	52	\$5,803	\$273,001	\$23,090,142	2.2%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	207	207	\$9,243	\$2,633,331	\$22,818,403	0.5%
Cardiac Arrhythmia & Conduction Disorders W/O Cc/Mcc (310)	49	49	\$9,103	\$172,497	\$20,446,112	5.0%
Simple Pneumonia & Pleurisy W/O Cc/Mcc (195)	45	45	\$11,954	\$204,262	\$20,082,360	5.8%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O Mcc (247)	195	195	\$21,497	\$2,436,954	\$15,434,716	1.1%
Simple Pneumonia & Pleurisy W Cc (194)	39	39	\$3,348	\$243,738	\$14,743,943	1.6%
Laparoscopic Cholecystectomy W/O C.D.E. W/O Cc/Mcc (419)	55	55	\$34,453	\$419,762	\$13,841,809	6.5%
Major Chest Procedures W/O Cc/Mcc (165)	39	39	\$54,231	\$507,749	\$13,807,128	12.7%
Red Blood Cell Disorders W/O Mcc (812)	50	50	\$6,431	\$254,320	\$12,756,558	2.7%
Heart Failure & Shock W Mcc (291)	54	54	\$4,388	\$483,107	\$12,749,851	0.7%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	1,196	1,196	\$38,034	\$15,367,937	\$11,936,755	0.2%
Misc Disorders Of Nutrition, metabolism, fluids/Electrolytes W/O Mcc (641)	47	47	\$3,269	\$210,349	\$11,891,411	1.7%
Major Cardiovasc Procedures W/O Mcc (238)	45	45	\$12,260	\$1,003,404	\$11,455,299	1.5%
Heart Failure & Shock W/O Cc/Mcc (293)	50	50	\$6,684	\$192,219	\$11,364,566	3.2%
Transient Ischemia (069)	56	56	\$5,881	\$243,125	\$10,789,833	2.7%
All Other Codes	8,657	8,657	\$1,152,409	\$118,436,144	\$231,832,597	0.9%
Combined	12,297	12,297	\$1,564,952	\$163,080,442	\$1,082,583,832	0.9%

Table J5: Service Specific Underpayment Rates: All Contractors

Service Billed to Part B/DME/Part A including Inpatient Hospital PPS	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
All	48,227	77,524	\$1,579,564	\$194,569,559	\$1,423,624,305	0.4%

Appendix K: Statistics and Other Information for the CERT Sample

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 DME 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 is using different units for each type of service.

Table K1: Claims in Error: Part B

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
HCPCS Procedure Code			
All Codes With Less Than 30 Claims	8,395	1,141	13.6%
Ground mileage (A0425)	550	40	7.3%
Initial hospital care (99223)	558	271	48.6%
Manual therapy (97140)	357	84	23.5%
Office/outpatient visit est (99213)	550	38	6.9%
Office/outpatient visit est (99214)	922	111	12.0%
Routine venipuncture (36415)	431	92	21.3%
Subsequent hospital care (99232)	1,198	175	14.6%
Subsequent hospital care (99233)	1,251	625	50.0%
Therapeutic exercises (97110)	448	97	21.7%
Other	19,777	3,126	15.8%
TOS Code			
Ambulance	1,450	95	6.6%
Hospital visit - initial	781	385	49.3%
Hospital visit - subsequent	3,192	997	31.2%
Lab tests - other (non-Medicare fee schedule)	2,671	604	22.6%
Minor procedures - other (Medicare fee schedule)	2,660	490	18.4%
Office visits - established	2,037	317	15.6%
Other drugs	1,711	288	16.8%
Specialist - ophthalmology	882	42	4.8%
Specialist - other	1,105	19	1.7%
Undefined codes	892	0	0.0%
Other	17,056	2,563	15.0%
Resolution Type			
Automated	8,956	608	6.8%
Complex	99	16	16.2%
None	25,334	5,167	20.4%
Routine	48	9	18.8%
Diagnosis Code			
Arthropathies and related disorders	1,672	321	19.2%
Diseases of other endocrine glands	1,112	179	16.1%
Disorders of the eye and adnexa	2,746	152	5.5%
Dorsopathies	1,718	336	19.6%
Hypertensive disease	940	192	20.4%
Ischemic heart disease	1,177	179	15.2%

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Osteopathies, chondropathies, and acquired musculoskeletal deformities	1,037	302	29.1%
Other forms of heart disease	1,212	270	22.3%
Other metabolic disorders and immunity disorders	869	210	24.2%
Symptoms	3,802	630	16.6%
Other	18,152	3,029	16.7%

Table K2: Claims in Error: DME

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Service			
All Codes With Less Than 30 Claims	3,235	1,447	44.7%
Blood glucose/reagent strips (A4253)	1,148	836	72.8%
Calibrator solution/chips (A4256)	437	305	69.8%
Disp fee inhal drugs/30 days (Q0513)	426	228	53.5%
Elevating whlchair leg rests (K0195)	358	325	90.8%
Hosp bed semi-electr w/ matt (E0260)	386	271	70.2%
Lancets per box (A4259)	615	456	74.1%
Oxygen concentrator (E1390)	1,262	860	68.1%
PWC gp 2 std cap chair (K0823)	747	659	88.2%
Portable gaseous O2 (E0431)	567	367	64.7%
Other	13,960	7,959	57.0%
TOS Code			
CPAP	1,189	701	59.0%
Glucose Monitor	2,668	1,886	70.7%
Lower Limb Prostheses	3,070	1,856	60.5%
Nebulizers & Related Drugs	1,422	720	50.6%
Oxygen Supplies/Equipment	2,176	1,434	65.9%
Parenteral Nutrition	613	287	46.8%
Support Surfaces	1,167	697	59.7%
Wheelchairs Motorized	1,412	1,176	83.3%
Wheelchairs Options/Accessories	2,500	1,608	64.3%
Wheelchairs Seating	612	357	58.3%
Other	6,312	2,991	47.4%
Resolution Type			
Automated	3,851	26	0.7%
Complex	86	23	26.7%
None	19,110	13,633	71.3%
Routine	94	31	33.0%
Diagnosis Code			
All Codes With Less Than 30 Claims	853	402	47.1%
Arthropathies and related disorders	1,032	719	69.7%
Chronic obstructive pulmonary disease and allied conditions	3,143	1,905	60.6%
Diseases of other endocrine glands	3,349	2,350	70.2%
No Matching Diagnosis Code Label	1,422	869	61.1%
Open wound of lower limb	2,766	1,670	60.4%
Other diseases of skin and subcutaneous tissue	1,159	668	57.6%
Other disorders of the central nervous system	1,493	785	52.6%
Persons with a condition influencing their health status	1,540	669	43.4%
Symptoms	700	353	50.4%
Other	5,684	3,323	58.5%

Table K3: Claims in Error: Part A Excluding Inpatient Hospital PPS

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Type Of Bill			
Clinic ESRD	409	142	34.7%
Clinical Rural Health	379	15	4.0%
Critical Access Hospital	325	97	29.8%
Federally Qualified Health Centers (Effective April 1, 2010)	270	11	4.1%
Home Health	1,379	318	23.1%
Hospital Inpatient (Part A)	246	35	14.2%
Hospital Outpatient	2,408	543	22.5%
Nonhospital based hospice	399	39	9.8%
SNF Inpatient	1,035	157	15.2%
SNF Inpatient Part B	200	28	14.0%
Other	546	115	21.1%
TOS Code			
Clinic ESRD	409	142	34.7%
Clinical Rural Health	379	15	4.0%
Critical Access Hospital	325	97	29.8%
Federally Qualified Health Centers (Effective April 1, 2010)	270	11	4.1%
Home Health	1,379	318	23.1%
Hospital Inpatient (Part A)	246	35	14.2%
Hospital Outpatient	2,408	543	22.5%
Nonhospital based hospice	399	39	9.8%
SNF Inpatient	1,035	157	15.2%
SNF Inpatient Part B	200	28	14.0%
Other	546	115	21.1%
Diagnosis Code			
All Codes With Less Than 30 Claims	240	34	14.2%
Arthropathies and related disorders	310	49	15.8%
Chronic obstructive pulmonary disease and allied conditions	200	25	12.5%
Diseases of other endocrine glands	332	86	25.9%
Dorsopathies	200	30	15.0%
Hypertensive disease	347	54	15.6%
Nephritis, nephrotic syndrome, and nephrosis	489	161	32.9%
Other forms of heart disease	386	83	21.5%
Persons encountering health services for specific procedures and aftercare	1,021	225	22.0%
Symptoms	622	139	22.3%
Other	3,449	614	17.8%

Table K4: Claims in Error: Part A Inpatient Hospital PPS

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
DRG Label			
AICD Generator Procedures (245)	550	220	40.0%
All Codes With Less Than 30 Claims	1,279	238	18.6%
Cardiac Defibrillator Implant W/O Cardiac Cath W/O Mcc (227)	480	244	50.8%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	1,196	115	9.6%
Other Circulatory System O.R. Procedures (264)	317	83	26.2%
Other Vascular Procedures W Cc (253)	297	55	18.5%
Perc Cardiovasc Proc W/O Coronary Artery Stent W/O Mcc (251)	311	113	36.3%
Permanent Cardiac Pacemaker Implant W Cc (243)	355	185	52.1%
Permanent Cardiac Pacemaker Implant W/O Cc/Mcc (244)	484	289	59.7%
Spinal Fusion Except Cervical W/O Mcc (460)	480	64	13.3%
Other	6,548	1,789	27.3%
TOS Code			
AICD Generator Procedures (245)	550	220	40.0%
All Codes With Less Than 30 Claims	641	138	21.5%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	481	244	50.7%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	240	65	27.1%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	1,205	116	9.6%
Other Circulatory System O.R. Procedures (264)	317	83	26.2%
Other Vascular Procedures (252 , 253 , 254)	355	72	20.3%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	311	113	36.3%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	843	476	56.5%
Spinal Fusion Except Cervical (459 , 460)	480	64	13.3%
Other	6,874	1,804	26.2%
Diagnosis Code			
Arthropathies and related disorders	1,179	150	12.7%
Cerebrovascular disease	336	66	19.6%
Complications of surgical and medical care, not elsewhere classified	930	204	21.9%
Diseases of arteries, arterioles, and capillaries	318	79	24.8%
Dorsopathies	695	168	24.2%
Fracture of lower limb	327	51	15.6%
Ischemic heart disease	822	268	32.6%
Osteopathies, chondropathies, and acquired musculoskeletal deformities	304	85	28.0%
Other forms of heart disease	1,899	813	42.8%
Symptoms	545	209	38.3%
Other	4,942	1,302	26.3%

Table K5: Included and Excluded in 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 is based on the final allowed charges, and the dollars in error for the provider compliance improper payment rate is based on the fee schedule amount for the billed service. 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 K6: Frequency of Claims that are Included and Excluded from Each Improper Payment Rate: Part B

Error Type	Included	Dropped	Total	Percent Included
Paid	17,130	532	17,662	97.0%
No Resolution	17,130	532	17,662	97.0%
Provider Compliance	17,130	532	17,662	97.0%

Table K7: Frequency of Claims that are Included and Excluded from Each Improper Payment Rate: DME

Error Type	Included	Dropped	Total	Percent Included
Paid	11,204	343	11,547	97.0%
No Resolution	11,208	339	11,547	97.1%
Provider Compliance	11,204	343	11,547	97.0%

Table K8: Frequency of Claims that are Included and Excluded from Each Improper Payment Rate: Part A including Inpatient Hospital PPS

Error Type	Included	Dropped	Total	Percent Included
Paid	19,893	4,634	24,527	81.1%
No Resolution	19,917	4,610	24,527	81.2%
Provider Compliance	19,893	4,634	24,527	81.1%