



The Supplementary Appendices for the

Medicare Fee-for-Service 2011 Improper Payment Rate Report

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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

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.

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	\$1,492,030,993	5.0%	4.2% - 5.8%	2.0%	84.1%	9.8%	4.0%	0.1%
Office visits - established	\$1,322,228,203	9.8%	8.9% - 10.6%	2.0%	44.1%	0.2%	53.4%	0.2%
Hospital visit - subsequent	\$912,302,586	16.2%	14.0% - 18.4%	3.6%	51.8%	0.0%	44.6%	0.0%
Hospital visit - initial	\$746,744,768	26.2%	23.1% - 29.2%	1.4%	33.4%	0.0%	65.2%	0.0%
Minor procedures - other (Medicare fee schedule)	\$688,433,756	21.9%	18.9% - 25.0%	31.0%	62.6%	2.8%	3.4%	0.2%
Lab tests - other (non-Medicare fee schedule)	\$575,309,510	20.0%	16.5% - 23.5%	3.4%	95.2%	1.2%	0.0%	0.2%
Office visits - new	\$477,951,678	18.8%	15.6% - 21.9%	0.6%	10.0%	0.0%	88.6%	0.8%
Other drugs	\$447,809,677	9.8%	2.6% - 17.0%	3.5%	87.0%	0.3%	9.1%	0.0%
Nursing home visit	\$282,278,613	16.2%	13.4% - 19.0%	6.5%	41.5%	0.0%	52.0%	0.0%
Chiropractic	\$263,038,123	44.1%	38.2% - 50.0%	0.3%	72.9%	26.5%	0.2%	0.2%
Oncology - radiation therapy	\$232,282,200	18.4%	(3.0%) - 39.9%	9.6%	90.0%	0.0%	0.4%	0.0%
Lab tests - other (Medicare fee schedule)	\$231,037,465	10.8%	1.0% - 20.6%	0.0%	99.3%	0.1%	0.6%	0.0%
Hospital visit - critical care	\$176,775,986	21.2%	12.9% - 29.5%	0.0%	68.9%	0.0%	31.1%	0.0%
Specialist - psychiatry	\$176,590,463	16.4%	10.0% - 22.7%	4.2%	91.7%	3.6%	0.5%	0.0%
Echography/ultrasonography - heart	\$146,234,462	15.0%	10.0% - 19.9%	4.0%	85.9%	9.6%	0.0%	0.4%
Ambulance	\$144,993,993	3.1%	0.8% - 5.3%	52.1%	23.3%	20.9%	3.7%	0.0%
Advanced imaging - CAT/CT/CTA: other	\$136,576,750	11.0%	6.2% - 15.7%	3.5%	94.8%	0.0%	1.6%	0.0%
Emergency room visit	\$136,456,067	7.1%	5.3% - 8.9%	0.0%	23.6%	0.0%	75.9%	0.5%
Dialysis services (Medicare Fee Schedule)	\$101,466,443	13.0%	4.6% - 21.4%	21.9%	55.1%	0.0%	23.0%	0.0%
Minor procedures - musculoskeletal	\$98,714,542	11.5%	7.2% - 15.8%	45.8%	46.0%	7.8%	0.4%	0.0%
Other tests - other	\$91,750,695	6.8%	3.5% - 10.1%	0.0%	96.7%	0.0%	3.3%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$8,881,006,974	10.5%	9.6% - 11.5%	6.2%	62.1%	3.4%	28.1%	0.1%

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	\$1,358,769,391	77.1%	74.7% - 79.6%	0.3%	97.1%	2.0%	0.2%	0.4%
Glucose Monitor	\$1,102,205,301	84.1%	81.8% - 86.4%	0.6%	94.2%	4.4%	0.1%	0.7%
All Policy Groups with Less than 30 Claims	\$1,086,263,217	66.4%	55.0% - 77.7%	0.5%	74.2%	22.4%	0.0%	2.9%
Nebulizers & Related Drugs	\$472,397,912	57.4%	42.2% - 72.6%	0.1%	99.1%	0.4%	0.2%	0.2%
CPAP	\$382,523,646	63.0%	57.2% - 68.7%	0.0%	99.7%	0.3%	0.0%	0.0%
Enteral Nutrition	\$245,028,621	62.9%	52.1% - 73.7%	0.0%	98.2%	1.8%	0.0%	0.0%
Diabetic Shoes	\$219,286,069	80.2%	72.6% - 87.9%	1.4%	94.6%	4.0%	0.0%	0.0%
Immunosuppressive Drugs	\$217,822,867	55.4%	43.2% - 67.5%	0.0%	97.4%	1.7%	0.7%	0.2%
All Other Codes	\$184,595,416	55.5%	47.5% - 63.5%	0.4%	93.0%	5.8%	0.7%	0.0%
Wheelchairs Manual	\$181,089,162	91.6%	88.4% - 94.8%	0.7%	91.5%	7.1%	0.0%	0.7%
Hospital Beds/Accessories	\$169,639,019	88.1%	83.6% - 92.6%	1.9%	93.1%	2.3%	2.0%	0.7%
Wheelchairs Options/Accessories	\$150,827,887	61.6%	35.2% - 88.0%	0.1%	55.9%	43.2%	0.0%	0.8%
Surgical Dressings	\$126,911,064	59.8%	40.2% - 79.3%	0.0%	75.0%	0.8%	14.3%	9.9%
Lower Limb Orthoses	\$103,785,072	35.9%	14.6% - 57.2%	0.0%	88.7%	5.9%	0.7%	4.7%
Respiratory Assist Device	\$98,661,175	68.1%	56.4% - 79.9%	0.0%	90.1%	2.7%	0.0%	7.2%
Ostomy Supplies	\$96,847,136	48.5%	36.8% - 60.3%	0.0%	99.7%	0.0%	0.0%	0.3%
Infusion Pumps & Related Drugs	\$85,652,554	31.1%	9.7% - 52.5%	0.0%	96.5%	3.5%	0.0%	0.0%
Support Surfaces	\$74,025,135	90.7%	80.0% - 101.4%	0.2%	97.3%	1.8%	0.8%	0.0%
Urological Supplies	\$72,732,681	36.1%	16.2% - 56.0%	0.0%	94.2%	5.8%	0.0%	0.0%
TENS	\$64,177,066	93.4%	87.1% - 99.8%	0.0%	100.0%	0.0%	0.0%	0.0%
Walkers	\$59,940,729	69.0%	58.8% - 79.2%	5.8%	89.3%	4.9%	0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$6,553,181,121	67.4%	64.2% - 70.6%	0.4%	91.0%	6.9%	0.5%	1.1%

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
Hospital Outpatient	\$1,562,011,243	5.0%	4.0% - 6.0%	0.8%	90.6%	3.0%	5.5%	0.1%
Home Health	\$1,505,756,407	7.0%	5.4% - 8.7%	2.9%	45.8%	44.1%	5.3%	1.9%
SNF Inpatient	\$1,148,287,955	4.7%	2.9% - 6.6%	0.0%	37.8%	37.5%	17.0%	7.7%
Clinic ESRD	\$397,655,251	4.9%	3.3% - 6.5%	0.0%	98.9%	0.0%	1.1%	0.0%
Nonhospital based hospice	\$292,306,913	2.3%	0.7% - 3.8%	0.0%	35.8%	64.2%	0.0%	0.0%
Critical Access Hospital	\$263,043,086	8.7%	6.6% - 10.8%	0.0%	94.6%	2.3%	2.9%	0.3%
Hospital Inpatient (Part A)	\$219,123,307	2.8%	0.8% - 4.7%	0.0%	61.9%	27.8%	0.0%	10.3%
Hospital Other Part B	\$199,229,389	41.1%	37.2% - 45.0%	0.0%	97.5%	1.8%	0.7%	0.0%
Hospital based hospice	\$120,893,048	6.8%	(4.5%) - 18.0%	0.0%	13.1%	86.9%	0.0%	0.0%
SNF Inpatient Part B	\$97,623,859	5.4%	3.1% - 7.8%	0.0%	97.8%	0.0%	2.2%	0.0%
Clinic OPT	\$43,698,843	9.0%	5.8% - 12.2%	0.5%	98.1%	0.0%	1.4%	0.0%
SNF Outpatient	\$27,685,967	11.9%	8.7% - 15.0%	0.0%	70.2%	29.2%	0.6%	0.0%
Clinical Rural Health	\$24,974,155	3.4%	2.1% - 4.7%	0.0%	96.0%	4.0%	0.0%	0.0%
Hospital Swing Bed	\$22,771,031	2.3%	1.9% - 2.8%	0.0%	94.1%	5.9%	0.0%	0.0%
Clinic – Freestanding (Effective April 1, 2010)	\$21,483,148	11.9%	5.5% - 18.3%	0.0%	100.0%	0.0%	0.0%	0.0%
Hospital Inpatient Part B	\$13,758,518	5.2%	1.4% - 8.9%	0.0%	95.7%	2.5%	1.7%	0.0%
Federally Qualified Health Centers (Effective April 1, 2010)	\$12,608,559	3.1%	0.5% - 5.6%	0.0%	100.0%	0.0%	0.0%	0.0%
Clinic CORF	\$6,443,700	12.8%	0.8% - 24.8%	0.0%	89.7%	0.0%	10.3%	0.0%
Community Mental Health Centers	\$5,119,079	2.0%	1.3% - 2.7%	0.0%	100.0%	0.0%	0.0%	0.0%
All Other Codes	\$0	0.0%	. - .					
Home Health (Part B Only)	\$0	0.0%	0.0% - 0.0%					
All Type of Services (Incl. Codes Not Listed)	\$5,984,473,459	5.1%	4.5% - 5.8%	0.9%	65.0%	25.3%	6.3%	2.4%

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	\$5,788,840,269	6.6%	5.5% - 7.7%	0.3%	15.0%	67.0%	17.3%	0.3%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	\$740,119,200	37.0%	26.0% - 47.9%	0.0%	0.0%	100.0%	0.0%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	\$686,696,738	11.5%	5.0% - 17.9%	0.0%	9.4%	90.6%	0.0%	0.0%
Other Vascular Procedures (252 , 253 , 254)	\$432,437,905	20.4%	1.7% - 39.1%	0.0%	2.2%	84.0%	13.8%	0.0%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	\$419,314,384	24.1%	9.6% - 38.5%	0.0%	7.3%	92.7%	0.0%	0.0%
Aicd Generator Procedures (245)	\$416,274,353	88.7%	. - .	0.0%	0.0%	100.0%	0.0%	0.0%
G.I. Hemorrhage (377 , 378 , 379)	\$332,349,083	20.9%	16.0% - 25.7%	0.0%	17.7%	70.7%	11.6%	0.0%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	\$323,601,668	15.4%	6.0% - 24.8%	0.0%	26.1%	73.9%	0.0%	0.0%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	\$314,115,026	10.6%	5.5% - 15.6%	0.0%	0.1%	92.5%	7.4%	0.0%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	\$272,750,499	21.9%	16.9% - 26.9%	0.0%	0.0%	100.0%	0.0%	0.0%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	\$240,725,385	33.1%	27.8% - 38.5%	0.0%	18.2%	73.6%	8.2%	0.0%
Renal Failure (682 , 683 , 684)	\$234,843,220	12.2%	4.5% - 19.9%	24.5%	2.5%	60.1%	12.9%	0.0%
Degenerative Nervous System Disorders (056 , 057)	\$227,710,932	8.1%	5.3% - 10.9%	0.0%	27.2%	72.5%	0.3%	0.0%
Kidney & Urinary Tract Infections (689 , 690)	\$225,677,860	13.0%	2.3% - 23.8%	19.0%	36.4%	33.1%	11.5%	0.0%
Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock (222 , 223)	\$218,606,628	71.9%	. - .	0.0%	0.0%	100.0%	0.0%	0.0%
Spinal Fusion Except Cervical (459 , 460)	\$212,064,304	13.4%	4.2% - 22.5%	0.0%	25.9%	74.1%	0.0%	0.0%
Heart Failure & Shock (291 , 292 , 293)	\$195,613,286	4.5%	1.6% - 7.5%	0.0%	26.7%	28.9%	44.4%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	\$194,270,577	15.0%	6.3% - 23.8%	0.0%	0.0%	99.0%	1.0%	0.0%
Chest Pain (313)	\$191,126,667	30.6%	21.0% - 40.3%	14.8%	1.9%	76.8%	0.0%	6.5%
Psychoses (885)	\$188,174,836	9.2%	1.6% - 16.8%	0.0%	3.5%	96.5%	0.0%	0.0%
Other Disorders Of Nervous System (091 , 092 , 093)	\$184,585,349	39.3%	6.9% - 71.8%	0.0%	0.0%	93.2%	6.8%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$12,039,898,168	9.6%	8.2% - 11.0%	1.2%	11.9%	75.8%	10.8%	0.3%

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.

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	44.1%	38.2% - 50.0%	0.3%	72.9%	26.5%	0.2%	0.2%
Hospital visit - initial	26.2%	23.1% - 29.2%	1.4%	33.4%	0.0%	65.2%	0.0%
Minor procedures - other (Medicare fee schedule)	21.9%	18.9% - 25.0%	31.0%	62.6%	2.8%	3.4%	0.2%
Hospital visit - critical care	21.2%	12.9% - 29.5%	0.0%	68.9%	0.0%	31.1%	0.0%
Lab tests - other (non-Medicare fee schedule)	20.0%	16.5% - 23.5%	3.4%	95.2%	1.2%	0.0%	0.2%
Office visits - new	18.8%	15.6% - 21.9%	0.6%	10.0%	0.0%	88.6%	0.8%
Oncology - radiation therapy	18.4%	(3.0%) - 39.9%	9.6%	90.0%	0.0%	0.4%	0.0%
Specialist - psychiatry	16.4%	10.0% - 22.7%	4.2%	91.7%	3.6%	0.5%	0.0%
Nursing home visit	16.2%	13.4% - 19.0%	6.5%	41.5%	0.0%	52.0%	0.0%
Hospital visit - subsequent	16.2%	14.0% - 18.4%	3.6%	51.8%	0.0%	44.6%	0.0%
Echography/ultrasonography - heart	15.0%	10.0% - 19.9%	4.0%	85.9%	9.6%	0.0%	0.4%
Dialysis services (Medicare Fee Schedule)	13.0%	4.6% - 21.4%	21.9%	55.1%	0.0%	23.0%	0.0%
Minor procedures - musculoskeletal	11.5%	7.2% - 15.8%	45.8%	46.0%	7.8%	0.4%	0.0%
Advanced imaging - CAT/CT/CTA: other	11.0%	6.2% - 15.7%	3.5%	94.8%	0.0%	1.6%	0.0%
Lab tests - other (Medicare fee schedule)	10.8%	1.0% - 20.6%	0.0%	99.3%	0.1%	0.6%	0.0%
Other drugs	9.8%	2.6% - 17.0%	3.5%	87.0%	0.3%	9.1%	0.0%
Office visits - established	9.8%	8.9% - 10.6%	2.0%	44.1%	0.2%	53.4%	0.2%
Emergency room visit	7.1%	5.3% - 8.9%	0.0%	23.6%	0.0%	75.9%	0.5%
Other tests - other	6.8%	3.5% - 10.1%	0.0%	96.7%	0.0%	3.3%	0.0%
All Other Codes	5.0%	4.2% - 5.8%	2.0%	84.1%	9.8%	4.0%	0.1%
Ambulance	3.1%	0.8% - 5.3%	52.1%	23.3%	20.9%	3.7%	0.0%
All Types of Services	10.5%	9.6% - 11.5%	6.2%	62.1%	3.4%	28.1%	0.1%

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
TENS	93.4%	87.1% - 99.8%	0.0%	100.0%	0.0%	0.0%	0.0%
Wheelchairs Manual	91.6%	88.4% - 94.8%	0.7%	91.5%	7.1%	0.0%	0.7%
Support Surfaces	90.7%	80.0% -101.4%	0.2%	97.3%	1.8%	0.8%	0.0%
Hospital Beds/Accessories	88.1%	83.6% - 92.6%	1.9%	93.1%	2.3%	2.0%	0.7%
Glucose Monitor	84.1%	81.8% - 86.4%	0.6%	94.2%	4.4%	0.1%	0.7%
Diabetic Shoes	80.2%	72.6% - 87.9%	1.4%	94.6%	4.0%	0.0%	0.0%
Oxygen Supplies/Equipment	77.1%	74.7% - 79.6%	0.3%	97.1%	2.0%	0.2%	0.4%
Walkers	69.0%	58.8% - 79.2%	5.8%	89.3%	4.9%	0.0%	0.0%
Respiratory Assist Device	68.1%	56.4% - 79.9%	0.0%	90.1%	2.7%	0.0%	7.2%
All Policy Groups with Less than 30 Claims	66.4%	55.0% - 77.7%	0.5%	74.2%	22.4%	0.0%	2.9%
CPAP	63.0%	57.2% - 68.7%	0.0%	99.7%	0.3%	0.0%	0.0%
Enteral Nutrition	62.9%	52.1% - 73.7%	0.0%	98.2%	1.8%	0.0%	0.0%
Wheelchairs Options/Accessories	61.6%	35.2% - 88.0%	0.1%	55.9%	43.2%	0.0%	0.8%
Surgical Dressings	59.8%	40.2% - 79.3%	0.0%	75.0%	0.8%	14.3%	9.9%
Nebulizers & Related Drugs	57.4%	42.2% - 72.6%	0.1%	99.1%	0.4%	0.2%	0.2%
All Other Codes	55.5%	47.5% - 63.5%	0.4%	93.0%	5.8%	0.7%	0.0%
Immunosuppressive Drugs	55.4%	43.2% - 67.5%	0.0%	97.4%	1.7%	0.7%	0.2%
Ostomy Supplies	48.5%	36.8% - 60.3%	0.0%	99.7%	0.0%	0.0%	0.3%
Urological Supplies	36.1%	16.2% - 56.0%	0.0%	94.2%	5.8%	0.0%	0.0%
Lower Limb Orthoses	35.9%	14.6% - 57.2%	0.0%	88.7%	5.9%	0.7%	4.7%
Infusion Pumps & Related Drugs	31.1%	9.7% - 52.5%	0.0%	96.5%	3.5%	0.0%	0.0%
All Types of Services	67.4%	64.2% - 70.6%	0.4%	91.0%	6.9%	0.5%	1.1%

Table C3: Top 20 Service Type Error 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	41.1%	37.2% - 45.0%	0.0%	97.5%	1.8%	0.7%	0.0%
Clinic CORF	12.8%	0.8% - 24.8%	0.0%	89.7%	0.0%	10.3%	0.0%
Clinic – Freestanding (Effective April 1, 2010)	11.9%	5.5% - 18.3%	0.0%	100.0%	0.0%	0.0%	0.0%
SNF Outpatient	11.9%	8.7% - 15.0%	0.0%	70.2%	29.2%	0.6%	0.0%
Clinic OPT	9.0%	5.8% - 12.2%	0.5%	98.1%	0.0%	1.4%	0.0%
Critical Access Hospital	8.7%	6.6% - 10.8%	0.0%	94.6%	2.3%	2.9%	0.3%
Home Health	7.0%	5.4% - 8.7%	2.9%	45.8%	44.1%	5.3%	1.9%
Hospital based hospice	6.8%	(4.5%) - 18.0%	0.0%	13.1%	86.9%	0.0%	0.0%
SNF Inpatient Part B	5.4%	3.1% - 7.8%	0.0%	97.8%	0.0%	2.2%	0.0%
Hospital Inpatient Part B	5.2%	1.4% - 8.9%	0.0%	95.7%	2.5%	1.7%	0.0%
Hospital Outpatient	5.0%	4.0% - 6.0%	0.8%	90.6%	3.0%	5.5%	0.1%
Clinic ESRD	4.9%	3.3% - 6.5%	0.0%	98.9%	0.0%	1.1%	0.0%
SNF Inpatient	4.7%	2.9% - 6.6%	0.0%	37.8%	37.5%	17.0%	7.7%
Clinical Rural Health	3.4%	2.1% - 4.7%	0.0%	96.0%	4.0%	0.0%	0.0%
Federally Qualified Health Centers (Effective April 1, 2010)	3.1%	0.5% - 5.6%	0.0%	100.0%	0.0%	0.0%	0.0%
Hospital Inpatient (Part A)	2.8%	0.8% - 4.7%	0.0%	61.9%	27.8%	0.0%	10.3%
Hospital Swing Bed	2.3%	1.9% - 2.8%	0.0%	94.1%	5.9%	0.0%	0.0%
Nonhospital based hospice	2.3%	0.7% - 3.8%	0.0%	35.8%	64.2%	0.0%	0.0%
Community Mental Health Centers	2.0%	1.3% - 2.7%	0.0%	100.0%	0.0%	0.0%	0.0%
All Other Codes	0.0%	. - .	N/A	N/A	N/A	N/A	N/A
Home Health (Part B Only)	0.0%	0.0% - 0.0%	N/A	N/A	N/A	N/A	N/A
All Types of Services	5.1%	4.5% - 5.8%	0.9%	65.0%	25.3%	6.3%	2.4%

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

Service Types for Which Part A Inpatient Hospital PPS is Responsible (MS-DRG Groups)	Improper Payment Rate	95% Confidence Interval	Type of Error				
			No Doc	Insufficient Doc	Medical Necessity	Incorrect Coding	Other
Aicd Generator Procedures (245)	88.7%	. - .	0.0%	0.0%	100.0%	0.0%	0.0%
Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock (222 , 223)	71.9%	. - .	0.0%	0.0%	100.0%	0.0%	0.0%
Other Disorders Of Nervous System (091 , 092 , 093)	39.3%	6.9% - 71.8%	0.0%	0.0%	93.2%	6.8%	0.0%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	37.0%	26.0% - 47.9%	0.0%	0.0%	100.0%	0.0%	0.0%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	33.1%	27.8% - 38.5%	0.0%	18.2%	73.6%	8.2%	0.0%
Chest Pain (313)	30.6%	21.0% - 40.3%	14.8%	1.9%	76.8%	0.0%	6.5%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	24.1%	9.6% - 38.5%	0.0%	7.3%	92.7%	0.0%	0.0%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	21.9%	16.9% - 26.9%	0.0%	0.0%	100.0%	0.0%	0.0%
G.I. Hemorrhage (377 , 378 , 379)	20.9%	16.0% - 25.7%	0.0%	17.7%	70.7%	11.6%	0.0%
Other Vascular Procedures (252 , 253 , 254)	20.4%	1.7% - 39.1%	0.0%	2.2%	84.0%	13.8%	0.0%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	15.4%	6.0% - 24.8%	0.0%	26.1%	73.9%	0.0%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	15.0%	6.3% - 23.8%	0.0%	0.0%	99.0%	1.0%	0.0%
Spinal Fusion Except Cervical (459 , 460)	13.4%	4.2% - 22.5%	0.0%	25.9%	74.1%	0.0%	0.0%
Kidney & Urinary Tract Infections (689 , 690)	13.0%	2.3% - 23.8%	19.0%	36.4%	33.1%	11.5%	0.0%
Renal Failure (682 , 683 , 684)	12.2%	4.5% - 19.9%	24.5%	2.5%	60.1%	12.9%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	11.5%	5.0% - 17.9%	0.0%	9.4%	90.6%	0.0%	0.0%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	10.6%	5.5% - 15.6%	0.0%	0.1%	92.5%	7.4%	0.0%
Psychoses (885)	9.2%	1.6% - 16.8%	0.0%	3.5%	96.5%	0.0%	0.0%
Degenerative Nervous System Disorders (056 , 057)	8.1%	5.3% - 10.9%	0.0%	27.2%	72.5%	0.3%	0.0%
All Other Codes	6.6%	5.5% - 7.7%	0.3%	15.0%	67.0%	17.3%	0.3%
Heart Failure & Shock (291 , 292 , 293)	4.5%	1.6% - 7.5%	0.0%	26.7%	28.9%	44.4%	0.0%
All Types of Services	9.6%	8.2% - 11.0%	1.2%	11.9%	75.8%	10.8%	0.3%

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.

Table D1: Top 20 Services with No Documentation Errors

Part B (HCPCS), DME (HCPCS), Part A Excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	No Documentation Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Minor procedures - other (Medicare fee schedule)	6.8%	\$213,215,931	5.8% - 7.8%
Ambulance	1.6%	\$75,548,544	(0.4%) - 3.6%
Renal Failure (682 , 683 , 684)	3.0%	\$57,488,894	(2.7%) - 8.7%
Minor procedures - musculoskeletal	5.2%	\$45,196,780	4.3% - 6.2%
Home Health	0.2%	\$43,462,997	(0.1%) - 0.5%
Kidney & Urinary Tract Infections (689 , 690)	2.5%	\$42,803,596	(2.3%) - 7.2%
Hospital visit - subsequent	0.6%	\$33,144,460	0.2% - 1.0%
Chest Pain (313)	4.5%	\$28,235,332	(4.0%) - 13.0%
Office visits - established	0.2%	\$26,342,783	0.0% - 0.4%
Oncology - radiation therapy	1.8%	\$22,238,662	1.2% - 2.3%
Dialysis services (Medicare Fee Schedule)	2.8%	\$22,213,114	2.3% - 3.4%
Lab tests - other (non-Medicare fee schedule)	0.7%	\$19,273,769	(0.2%) - 1.6%
Nursing home visit	1.0%	\$18,208,070	(0.1%) - 2.1%
Appendectomy W/O Complicated Principal Diag (341 , 342 , 343)	19.3%	\$17,835,548	. - .
Other drugs	0.3%	\$15,788,185	(0.3%) - 1.0%
Hospital Outpatient	0.0%	\$12,870,946	0.0% - 0.1%
Hospital visit - initial	0.4%	\$10,733,145	(0.2%) - 1.0%
Specialist - psychiatry	0.7%	\$7,378,622	(0.2%) - 1.6%
Glucose Monitor	0.5%	\$6,501,088	0.1% - 0.9%
Echography/ultrasonography - heart	0.6%	\$5,902,634	(0.4%) - 1.6%
All Other Codes	0.0%	\$61,028,357	0.0% - 0.0%
Overall	0.2%	\$785,411,456	0.1% - 0.4%

Table D2: Top 20 Services with Insufficient Documentation Errors

Part B (HCPCS), DME (HCPCS), Part A Excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Insufficient Documentation Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Hospital Outpatient	4.5%	\$1,414,603,053	3.6% - 5.5%
Oxygen Supplies/Equipment	74.9%	\$1,318,958,096	72.3% - 77.5%
Glucose Monitor	79.2%	\$1,038,023,334	76.6% - 81.7%
All Policy Groups with Less than 30 Claims	49.2%	\$805,642,723	37.2% - 61.3%
Home Health	3.2%	\$689,627,612	1.9% - 4.5%
Office visits - established	4.3%	\$583,577,695	3.6% - 5.0%
Lab tests - other (non-Medicare fee schedule)	19.0%	\$547,973,278	15.7% - 22.4%
Hospital visit - subsequent	8.4%	\$472,544,429	6.5% - 10.2%
Nebulizers & Related Drugs	56.9%	\$468,319,350	41.7% - 72.1%
SNF Inpatient	1.8%	\$434,355,546	0.8% - 2.8%
Minor procedures - other (Medicare fee schedule)	13.7%	\$431,086,097	10.9% - 16.6%
Clinic ESRD	4.8%	\$393,248,635	3.2% - 6.5%
Other drugs	8.5%	\$389,720,221	1.5% - 15.5%
CPAP	62.8%	\$381,329,475	57.0% - 68.5%
Hospital visit - initial	8.7%	\$249,171,925	5.9% - 11.5%
Critical Access Hospital	8.2%	\$248,708,132	6.2% - 10.3%
Enteral Nutrition	61.8%	\$240,612,845	50.9% - 72.6%
Lab tests - other (Medicare fee schedule)	10.7%	\$229,526,613	1.0% - 20.5%
Immunosuppressive Drugs	53.9%	\$212,117,981	41.7% - 66.1%
Oncology - radiation therapy	16.6%	\$209,138,436	(5.3%) - 38.5%
All Other Codes	2.9%	\$6,046,275,144	2.6% - 3.3%
Overall	5.0%	\$16,804,560,619	4.6% - 5.4%

Table D3: Top 20 Services with Medical Necessity Errors

Part B (HCPCS), DME (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Medical Necessity Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	37.0%	\$740,119,200	26.0% - 47.9%
Home Health	3.1%	\$664,665,615	2.1% - 4.1%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	10.4%	\$621,951,356	3.9% - 16.8%
SNF Inpatient	1.8%	\$430,761,197	0.3% - 3.3%
Aicd Generator Procedures (245)	88.7%	\$416,274,353	. - .
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	22.3%	\$388,589,011	7.7% - 37.0%
Other Vascular Procedures (252 , 253 , 254)	17.1%	\$363,081,955	(1.4%) - 35.6%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	9.8%	\$290,611,224	4.7% - 14.8%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	21.9%	\$272,750,499	16.9% - 26.9%
All Policy Groups with Less than 30 Claims	14.9%	\$243,528,294	6.3% - 23.4%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	11.4%	\$239,238,581	2.3% - 20.5%
G.I. Hemorrhage (377 , 378 , 379)	14.8%	\$235,109,811	11.5% - 18.0%
Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock (222 , 223)	71.9%	\$218,606,628	. - .
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	14.9%	\$192,239,783	6.1% - 23.6%
Nonhospital based hospice	1.5%	\$187,632,078	0.2% - 2.7%
Psychoses (885)	8.8%	\$181,573,286	1.3% - 16.4%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	24.4%	\$177,281,782	19.4% - 29.4%
Other Disorders Of Nervous System (091 , 092 , 093)	36.7%	\$172,116,526	3.1% - 70.2%
Cranial & Peripheral Nerve Disorders (073 , 074)	61.6%	\$169,276,098	60.2% - 63.0%
Degenerative Nervous System Disorders (056 , 057)	5.9%	\$165,014,511	3.0% - 8.8%
All Other Codes	2.0%	\$5,035,998,419	1.7% - 2.4%
Overall	3.4%	\$11,406,420,207	2.8% - 3.9%

Table D4: Top 20 Services with Incorrect Coding Errors

Part B (HCPCS), DME (HCPCS), Part A Excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Incorrect Coding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Office visits - established	5.2%	\$706,678,651	4.7% - 5.7%
Hospital visit - initial	17.1%	\$486,839,697	15.0% - 19.1%
Office visits - new	16.6%	\$423,273,645	13.6% - 19.7%
Hospital visit - subsequent	7.2%	\$406,613,697	5.8% - 8.6%
SNF Inpatient	0.8%	\$195,044,240	0.5% - 1.1%
Nursing home visit	8.4%	\$146,819,522	6.5% - 10.4%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	1.9%	\$107,844,496	(0.4%) - 4.2%
Emergency room visit	5.4%	\$103,597,763	4.1% - 6.7%
Other Digestive System O.R. Procedures (356 , 357 , 358)	18.8%	\$95,356,864	. - .
Heart Failure & Shock (291 , 292 , 293)	2.0%	\$86,847,919	0.2% - 3.8%
Hospital Outpatient	0.3%	\$85,492,683	0.1% - 0.5%
Home Health	0.4%	\$79,981,848	0.2% - 0.6%
Craniotomy & Endovascular Intracranial Procedures (025 , 026 , 027)	4.1%	\$61,983,228	3.9% - 4.2%
Other Vascular Procedures (252 , 253 , 254)	2.8%	\$59,870,063	(2.6%) - 8.3%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	1.7%	\$59,137,410	0.3% - 3.1%
Disorders Of Liver Except Malig,cirr,alc Hepa (441 , 442 , 443)	13.4%	\$56,506,619	10.4% - 16.3%
Hospital visit - critical care	6.6%	\$55,018,138	(1.5%) - 14.7%
Acute & Subacute Endocarditis (288 , 289 , 290)	34.8%	\$49,174,755	. - .
Other drugs	0.9%	\$40,905,175	(0.6%) - 2.3%
Other Disorders Of The Eye (124 , 125)	42.3%	\$38,727,847	. - .
All Other Codes	0.4%	\$857,324,202	0.3% - 0.5%
Overall	1.2%	\$4,203,038,464	1.1% - 1.4%

Table D5: Top 20 Services with Underpayment Coding Errors

Part B (HCPCS), DME (HCPCS), Part A Excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Underpayment Coding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Office visits - established	0.8%	\$110,339,219	0.6% - 1.0%
Other Digestive System O.R. Procedures (356 , 357 , 358)	18.2%	\$92,623,242	. - .
Heart Failure & Shock (291 , 292 , 293)	1.5%	\$63,215,200	(0.2%) - 3.1%
Other Vascular Procedures (252 , 253 , 254)	2.8%	\$59,870,063	(2.6%) - 8.3%
Hospital Outpatient	0.1%	\$43,084,352	(0.0%) - 0.3%
Cervical Spinal Fusion (471 , 472 , 473)	3.4%	\$30,508,817	. - .
Respiratory System Diagnosis W Ventilator Support 96+ Hours (207)	1.7%	\$28,758,630	1.5% - 2.0%
Renal Failure (682 , 683 , 684)	1.4%	\$27,002,953	(0.5%) - 3.3%
Hospital visit - subsequent	0.4%	\$24,296,787	0.0% - 0.8%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	0.6%	\$21,832,274	(0.6%) - 1.8%
Nutritional & Misc Metabolic Disorders (640 , 641)	1.5%	\$19,299,403	(1.4%) - 4.3%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	1.3%	\$19,008,290	(0.5%) - 3.1%
SNF Inpatient	0.1%	\$17,542,534	(0.0%) - 0.2%
Major Male Pelvic Procedures (707 , 708)	6.0%	\$16,311,773	. - .
Bronchitis & Asthma (202 , 203)	6.1%	\$12,994,243	(4.5%) - 16.8%
Home Health	0.1%	\$12,827,115	0.0% - 0.1%
Other Circulatory System Diagnoses (314 , 315 , 316)	1.3%	\$12,821,339	0.9% - 1.7%
Anal & Stomal Procedures (347 , 348 , 349)	14.9%	\$11,729,375	. - .
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	1.0%	\$11,032,517	0.6% - 1.4%
Viral Illness (865 , 866)	8.7%	\$10,741,288	7.6% - 9.9%
All Other Codes	0.1%	\$111,009,740	0.0% - 0.1%
Overall	0.2%	\$756,849,153	0.1% - 0.3%

Table D6: Top 20 Services with Other Errors

Part B (HCPCS), DME (HCPCS), Part A Excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Other Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
SNF Inpatient	0.4%	\$88,126,972	(0.1%) - 0.9%
All Policy Groups with Less than 30 Claims	1.9%	\$31,057,817	(1.4%) - 5.2%
Home Health	0.1%	\$28,018,336	(0.1%) - 0.4%
Hospital Inpatient (Part A)	0.3%	\$22,567,175	(0.3%) - 0.8%
Surgical Dressings	5.9%	\$12,578,623	(5.0%) - 16.8%
Chest Pain (313)	2.0%	\$12,511,516	(1.9%) - 5.9%
Tendonitis, Myositis & Bursitis (557 , 558)	9.5%	\$12,434,413	. - .
Glucose Monitor	0.6%	\$8,107,902	0.1% - 1.1%
Respiratory Assist Device	4.9%	\$7,121,435	(3.2%) - 13.0%
Oxygen Supplies/Equipment	0.3%	\$5,362,694	(0.1%) - 0.7%
Lower Limb Orthoses	1.7%	\$4,907,997	(1.1%) - 4.5%
Office visits - new	0.1%	\$3,743,024	(0.1%) - 0.4%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	0.0%	\$2,726,283	(0.0%) - 0.1%
Office visits - established	0.0%	\$2,349,750	0.0% - 0.0%
Transurethral Procedures (668 , 669 , 670)	0.6%	\$2,236,280	. - .
Traumatic Stupor & Coma, Coma <1 Hr (085 , 086 , 087)	0.5%	\$2,039,194	. - .
Hospital Outpatient	0.0%	\$1,418,913	(0.0%) - 0.0%
Minor procedures - other (Medicare fee schedule)	0.0%	\$1,341,329	(0.0%) - 0.1%
Hospital Beds/Accessories	0.6%	\$1,229,261	(0.3%) - 1.5%
Wheelchairs Manual	0.6%	\$1,213,080	(0.6%) - 1.8%
All Other Codes	0.0%	\$8,036,981	0.0% - 0.0%
Overall	0.1%	\$259,128,977	0.0% - 0.1%

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.

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
Office visits - established	9.8%	5,690	\$1,322,228,203	0.4%	8.9% - 10.6%
Hospital visit - subsequent	16.2%	1,571	\$912,302,586	1.1%	14.0% - 18.4%
Hospital visit - initial	26.2%	661	\$746,744,768	1.6%	23.1% - 29.2%
Minor procedures - other (Medicare fee schedule)	21.9%	1,434	\$688,433,756	1.5%	18.9% - 25.0%
Lab tests - other (non-Medicare fee schedule)	20.0%	2,265	\$575,309,510	1.8%	16.5% - 23.5%
Office visits - new	18.8%	665	\$477,951,678	1.6%	15.6% - 21.9%
Other drugs	9.8%	584	\$447,809,677	3.7%	2.6% - 17.0%
Nursing home visit	16.2%	616	\$282,278,613	1.4%	13.4% - 19.0%
Chiropractic	44.1%	625	\$263,038,123	3.0%	38.2% - 50.0%
Oncology - radiation therapy	18.4%	76	\$232,282,200	11.0%	(3.0%) - 39.9%
Lab tests - other (Medicare fee schedule)	10.8%	390	\$231,037,465	5.0%	1.0% - 20.6%
Hospital visit - critical care	21.2%	124	\$176,775,986	4.2%	12.9% - 29.5%
Specialist - psychiatry	16.4%	402	\$176,590,463	3.2%	10.0% - 22.7%
Echography/ultrasonography - heart	15.0%	294	\$146,234,462	2.5%	10.0% - 19.9%
Ambulance	3.1%	358	\$144,993,993	1.2%	0.8% - 5.3%
Advanced imaging - CAT/CT/CTA: other	11.0%	245	\$136,576,750	2.4%	6.2% - 15.7%
Emergency room visit	7.1%	552	\$136,456,067	0.9%	5.3% - 8.9%
Dialysis services (Medicare Fee Schedule)	13.0%	94	\$101,466,443	4.3%	4.6% - 21.4%
Minor procedures - musculoskeletal	11.5%	263	\$98,714,542	2.2%	7.2% - 15.8%
Other tests - other	6.8%	349	\$91,750,695	1.7%	3.5% - 10.1%
Standard imaging - nuclear medicine	8.3%	142	\$90,534,042	2.2%	4.0% - 12.6%
Specialist - ophthalmology	3.3%	611	\$88,919,890	0.7%	1.9% - 4.8%
All Codes With Less Than 30 Claims	2.2%	255	\$88,799,924	0.8%	0.7% - 3.8%
Standard imaging - musculoskeletal	14.3%	612	\$87,302,736	2.1%	10.1% - 18.5%
Lab tests - blood counts	25.0%	869	\$84,997,960	1.7%	21.8% - 28.3%
Lab tests - automated general profiles	20.8%	913	\$81,440,168	1.9%	17.1% - 24.5%
Ambulatory procedures - skin	3.9%	359	\$73,810,488	2.1%	(0.1%) - 7.9%
Standard imaging - chest	16.7%	913	\$72,691,054	2.0%	12.9% - 20.6%
Advanced imaging - MRI/MRA: other	4.5%	126	\$67,930,095	1.6%	1.5% - 7.6%
Other tests - electrocardiograms	15.5%	761	\$58,741,345	1.7%	12.3% - 18.8%
Minor procedures - skin	5.4%	444	\$57,535,271	1.7%	2.1% - 8.8%
Echography/ultrasonography - carotid arteries	15.6%	62	\$44,375,637	2.2%	11.3% - 19.8%

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
Echography/ultrasonography - other	7.1%	186	\$38,441,396	2.1%	3.0% - 11.2%
Other - Medicare fee schedule	18.0%	113	\$37,340,666	5.0%	8.2% - 27.8%
Lab tests - routine venipuncture (non Medicare fee schedule)	21.5%	1,542	\$34,878,737	1.4%	18.7% - 24.3%
Ambulatory procedures - other	4.2%	257	\$33,394,843	1.7%	0.8% - 7.7%
Anesthesia	1.9%	274	\$32,578,036	1.1%	(0.2%) - 4.0%
Advanced imaging - CAT/CT/CTA: brain/head/neck	10.4%	150	\$31,912,463	2.0%	6.5% - 14.2%
Echography/ultrasonography - abdomen/pelvis	10.1%	102	\$31,389,643	3.0%	4.2% - 16.0%
Consultations	17.2%	50	\$29,759,400	3.2%	11.1% - 23.4%
Endoscopy - upper gastrointestinal	5.4%	80	\$27,656,740	0.9%	3.7% - 7.1%
Standard imaging - other	7.8%	166	\$25,172,797	2.3%	3.3% - 12.2%
Specialist - other	11.1%	1,001	\$23,079,554	4.9%	1.4% - 20.7%
Home visit	11.3%	40	\$21,640,528	2.4%	6.6% - 16.1%
Other - non-Medicare fee schedule	47.2%	144	\$21,612,365	9.0%	29.5% - 64.8%
Other tests - EKG monitoring	6.9%	72	\$21,609,642	0.9%	5.2% - 8.7%
Advanced imaging - MRI/MRA: brain/head/neck	6.0%	60	\$20,501,708	1.9%	2.2% - 9.8%
Major procedure, cardiovascular-Other	2.2%	59	\$20,472,564	1.4%	(0.5%) - 4.9%
Eye procedure - cataract removal/lens insertion	0.9%	93	\$18,958,035	0.7%	(0.5%) - 2.3%
Oncology - other	6.8%	65	\$16,643,554	3.2%	0.6% - 13.1%
Imaging/procedure - other	6.5%	122	\$16,368,409	2.1%	2.3% - 10.7%
Major procedure - Other	1.4%	59	\$15,372,790	1.3%	(1.1%) - 3.9%
Lab tests - urinalysis	21.3%	476	\$13,405,016	2.2%	17.0% - 25.6%
Other tests - cardiovascular stress tests	7.7%	72	\$13,047,963	1.6%	4.4% - 10.9%
Lab tests - bacterial cultures	12.0%	135	\$11,802,216	1.5%	9.0% - 15.0%
Standard imaging - breast	2.7%	146	\$8,909,569	0.9%	0.9% - 4.4%
Standard imaging - contrast gastrointestinal	8.6%	43	\$6,021,462	2.8%	3.1% - 14.1%
Lab tests - glucose	19.7%	124	\$5,250,027	1.6%	16.6% - 22.8%
Endoscopy - colonoscopy	0.7%	82	\$5,181,589	0.4%	(0.1%) - 1.5%
Immunizations/Vaccinations	1.1%	333	\$5,052,436	0.5%	0.2% - 2.1%
Echography/ultrasonography - eye	3.7%	50	\$4,560,625	0.4%	2.9% - 4.5%
Eye procedure - other	0.2%	87	\$1,510,536	0.1%	(0.1%) - 0.4%
Endoscopy - cystoscopy	0.4%	39	\$1,094,729	0.4%	(0.4%) - 1.1%
Chemotherapy	0.0%	40	\$332,346	0.0%	0.0% - 0.1%
Ambulatory procedures - musculoskeletal	0.0%	31	N/A	N/A	N/A
Undefined codes	N/A	581	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	10.5%	20,494	\$8,881,006,974	0.5%	9.6% - 11.5%

Table E2: Improper Payment Rates by Service Type: DME

Service Types Billed to DME	Improper Payment Rate				
	Improper Payment Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Oxygen Supplies/Equipment	77.1%	1,705	\$1,358,769,391	1.3%	74.7% - 79.6%
Glucose Monitor	84.1%	1,798	\$1,102,205,301	1.2%	81.8% - 86.4%
All Policy Groups with Less than 30 Claims	66.4%	309	\$1,086,263,217	5.8%	55.0% - 77.7%
Nebulizers & Related Drugs	57.4%	1,104	\$472,397,912	7.8%	42.2% - 72.6%
CPAP	63.0%	704	\$382,523,646	2.9%	57.2% - 68.7%
Enteral Nutrition	62.9%	168	\$245,028,621	5.5%	52.1% - 73.7%
Diabetic Shoes	80.2%	135	\$219,286,069	3.9%	72.6% - 87.9%
Immunosuppressive Drugs	55.4%	152	\$217,822,867	6.2%	43.2% - 67.5%
Wheelchairs Manual	91.6%	450	\$181,089,162	1.6%	88.4% - 94.8%
Hospital Beds/Accessories	88.1%	287	\$169,639,019	2.3%	83.6% - 92.6%
Wheelchairs Options/Accessories	61.6%	204	\$150,827,887	13.5%	35.2% - 88.0%
Surgical Dressings	59.8%	119	\$126,911,064	10.0%	40.2% - 79.3%
Lower Limb Orthoses	35.9%	91	\$103,785,072	10.9%	14.6% - 57.2%
Respiratory Assist Device	68.1%	85	\$98,661,175	6.0%	56.4% - 79.9%
Ostomy Supplies	48.5%	188	\$96,847,136	6.0%	36.8% - 60.3%
Infusion Pumps & Related Drugs	31.1%	97	\$85,652,554	10.9%	9.7% - 52.5%
Support Surfaces	90.7%	57	\$74,025,135	5.5%	80.0% -101.4%
Urological Supplies	36.1%	150	\$72,732,681	10.2%	16.2% - 56.0%
TENS	93.4%	85	\$64,177,066	3.2%	87.1% - 99.8%
Walkers	69.0%	129	\$59,940,729	5.2%	58.8% - 79.2%
Commodes/Bed Pans/Urinals	90.6%	66	\$41,638,338	3.5%	83.7% - 97.5%
Upper Limb Orthoses	47.5%	63	\$37,065,857	10.5%	26.9% - 68.1%
Wheelchairs Seating	85.2%	35	\$27,981,941	8.1%	69.2% -101.1%
Breast Prostheses	43.5%	31	\$21,724,787	11.5%	20.9% - 66.0%
Patient Lift	78.1%	32	\$17,490,244	7.9%	62.7% - 93.5%
Lenses	23.6%	91	\$15,006,740	5.7%	12.4% - 34.9%
Suction Pump	56.6%	43	\$11,002,658	14.3%	28.6% - 84.5%
Repairs/DME	65.8%	40	\$8,969,588	9.5%	47.1% - 84.4%
Canes/Crutches	54.2%	43	\$3,715,263	9.2%	36.1% - 72.3%
Routinely Denied Items	N/A	93	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	67.4%	8,110	\$6,553,181,121	1.7%	64.2% - 70.6%

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
Hospital Outpatient	5.0%	8,248	\$1,562,011,243	0.5%	4.0% - 6.0%
Home Health	7.0%	1,199	\$1,505,756,407	0.8%	5.4% - 8.7%
SNF Inpatient	4.7%	844	\$1,148,287,955	1.0%	2.9% - 6.6%
Clinic ESRD	4.9%	410	\$397,655,251	0.8%	3.3% - 6.5%
Nonhospital based hospice	2.3%	459	\$292,306,913	0.8%	0.7% - 3.8%
Critical Access Hospital	8.7%	1,088	\$263,043,086	1.1%	6.6% - 10.8%
Hospital Inpatient (Part A)	2.8%	269	\$219,123,307	1.0%	0.8% - 4.7%
Hospital Other Part B	41.1%	1,150	\$199,229,389	2.0%	37.2% - 45.0%
Hospital based hospice	6.8%	77	\$120,893,048	5.7%	(4.5%) - 18.0%
SNF Inpatient Part B	5.4%	266	\$97,623,859	1.2%	3.1% - 7.8%
Clinic OPT	9.0%	174	\$43,698,843	1.6%	5.8% - 12.2%
SNF Outpatient	11.9%	65	\$27,685,967	1.6%	8.7% - 15.0%
Clinical Rural Health	3.4%	924	\$24,974,155	0.7%	2.1% - 4.7%
Hospital Swing Bed	2.3%	20	\$22,771,031	0.2%	1.9% - 2.8%
Clinic – Freestanding (Effective April 1, 2010)	11.9%	156	\$21,483,148	3.3%	5.5% - 18.3%
Hospital Inpatient Part B	5.2%	70	\$13,758,518	1.9%	1.4% - 8.9%
Federally Qualified Health Centers (Effective April 1, 2010)	3.1%	213	\$12,608,559	1.3%	0.5% - 5.6%
Clinic CORF	12.8%	47	\$6,443,700	6.1%	0.8% - 24.8%
Community Mental Health Centers	2.0%	52	\$5,119,079	0.3%	1.3% - 2.7%
Home Health (Part B Only)	0.0%	33	N/A	N/A	N/A
Hospital Outpatient (ASC)	0.0%	1	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	5.1%	15,765	\$5,984,473,459	0.3%	4.5% - 5.8%

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
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	37.0%	40	\$740,119,200	5.6%	26.0% - 47.9%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	11.5%	154	\$686,696,738	3.3%	5.0% - 17.9%
Other Vascular Procedures (252 , 253 , 254)	20.4%	39	\$432,437,905	9.6%	1.7% - 39.1%
Circulatory Disorders Except Ami, W Card Cath (286 , 287)	24.1%	72	\$419,314,384	7.4%	9.6% - 38.5%
Aicd Generator Procedures (245)	88.7%	2	\$416,274,353		
G.I. Hemorrhage (377 , 378 , 379)	20.9%	84	\$332,349,083	2.5%	16.0% - 25.7%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	15.4%	56	\$323,601,668	4.8%	6.0% - 24.8%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	10.6%	131	\$314,115,026	2.6%	5.5% - 15.6%
Perc Cardiovasc Proc W/O Coronary Artery Stent (250 , 251)	21.9%	17	\$272,750,499	2.6%	16.9% - 26.9%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	33.1%	12	\$240,725,385	2.7%	27.8% - 38.5%
Renal Failure (682 , 683 , 684)	12.2%	80	\$234,843,220	3.9%	4.5% - 19.9%
Degenerative Nervous System Disorders (056 , 057)	8.1%	27	\$227,710,932	1.4%	5.3% - 10.9%
Kidney & Urinary Tract Infections (689 , 690)	13.0%	101	\$225,677,860	5.5%	2.3% - 23.8%
Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock (222 , 223)	71.9%	2	\$218,606,628		
Spinal Fusion Except Cervical (459 , 460)	13.4%	27	\$212,064,304	4.7%	4.2% - 22.5%
Heart Failure & Shock (291 , 292 , 293)	4.5%	182	\$195,613,286	1.5%	1.6% - 7.5%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	15.0%	101	\$194,270,577	4.5%	6.3% - 23.8%
Chest Pain (313)	30.6%	57	\$191,126,667	4.9%	21.0% - 40.3%
Psychoses (885)	9.2%	89	\$188,174,836	3.9%	1.6% - 16.8%
Other Disorders Of Nervous System (091 , 092 , 093)	39.3%	14	\$184,585,349	16.6%	6.9% - 71.8%
Nutritional & Misc Metabolic Disorders (640 , 641)	13.1%	85	\$169,534,462	3.5%	6.3% - 19.8%
Cranial & Peripheral Nerve Disorders (073 , 074)	61.7%	13	\$169,482,647	0.7%	60.3% - 63.1%
Disorders Of The Biliary Tract (444 , 445 , 446)	59.4%	16	\$164,489,320	4.5%	50.5% - 68.2%
Syncope & Collapse (312)	19.0%	61	\$161,279,762	4.2%	10.7% - 27.3%
Uterine & Adnexa Proc For Non-Malignancy (742 , 743)	45.0%	15	\$142,705,312	0.2%	44.6% - 45.3%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	2.2%	139	\$127,480,131	1.2%	(0.2%) - 4.6%
Back & Neck Proc Exc Spinal Fusion (490 , 491)	18.5%	26	\$123,447,251	4.1%	10.6% - 26.5%
Cardiac Pacemaker Revision Except Device Replacement (260 , 261 , 262)	91.4%	4	\$121,510,997	1.7%	88.0% - 94.8%
Signs & Symptoms (947 , 948)	33.3%	23	\$120,669,504	5.1%	23.2% - 43.3%
Lower Extrem & Humer Proc Except Hip,foot,femur (492 , 493 , 494)	20.5%	24	\$118,281,890	6.2%	8.3% - 32.6%
Red Blood Cell Disorders (811 , 812)	9.7%	53	\$107,332,198	0.9%	7.8% - 11.5%
Transurethral Prostatectomy (713 , 714)	91.6%	11	\$103,187,200	0.4%	90.7% - 92.5%
Menstrual & Other Female Reproductive System Disorders (760 , 761)	100.0%	1	\$101,433,430		
Revision Of Hip Or Knee Replacement (466 , 467 , 468)	9.4%	18	\$100,161,797	8.1%	(6.5%) - 25.3%

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
Extensive O.R. Procedure Unrelated To Principal Diagnosis (981 , 982 , 983)	2.7%	20	\$98,693,567	0.6%	1.5% - 4.0%
Digestive Malignancy (374 , 375 , 376)	32.3%	9	\$97,053,963	15.4%	2.1% - 62.6%
Other Digestive System O.R. Procedures (356 , 357 , 358)	18.8%	8	\$95,356,864		
Organic Disturbances & Mental Retardation (884)	40.7%	11	\$91,624,744	18.2%	5.0% - 76.5%
Other Kidney & Urinary Tract Diagnoses (698 , 699 , 700)	14.5%	20	\$88,875,532	0.5%	13.5% - 15.5%
Headaches (102 , 103)	78.1%	8	\$88,853,967		
Cervical Spinal Fusion (471 , 472 , 473)	9.9%	19	\$88,370,913		
Other Kidney & Urinary Tract Procedures (673 , 674 , 675)	17.5%	10	\$85,327,318	13.3%	(8.6%) - 43.7%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	2.4%	146	\$85,021,075	0.9%	0.6% - 4.2%
Biopsies Of Musculoskeletal System & Connective Tissue (477 , 478 , 479)	38.7%	7	\$80,112,698	6.0%	26.9% - 50.6%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	5.3%	99	\$77,956,535	1.2%	3.0% - 7.7%
Transient Ischemia (069)	14.5%	32	\$71,761,564	5.0%	4.6% - 24.4%
Vagina, Cervix & Vulva Procedures (746 , 747)	61.3%	5	\$71,596,542		
Tendonitis, Myositis & Bursitis (557 , 558)	52.2%	6	\$68,160,243		
Endocrine Disorders (643 , 644 , 645)	63.5%	4	\$67,039,368		
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	6.2%	43	\$66,612,453	1.6%	3.1% - 9.2%
Nervous System Neoplasms (054 , 055)	57.9%	4	\$65,706,479		
Appendectomy W/O Complicated Principal Diag (341 , 342 , 343)	70.6%	5	\$65,353,200		
Disorders Of Liver Except Malig.cirr,alc Hepa (441 , 442 , 443)	15.1%	14	\$63,799,190	1.7%	11.7% - 18.4%
Foot Procedures (503 , 504 , 505)	72.0%	5	\$62,946,703		
Craniotomy & Endovascular Intracranial Procedures (025 , 026 , 027)	4.1%	14	\$61,983,228	0.1%	3.9% - 4.2%
Perc Cardiovasc Proc W Non-Drug-Eluting Stent (248 , 249)	13.7%	15	\$61,253,647	3.7%	6.5% - 21.0%
Bone Marrow Transplant (009)	100.0%	2	\$61,150,874		
Amputation For Musculoskeletal Sys & Conn Tissue Dis (474 , 475 , 476)	47.3%	3	\$58,978,364		
Bone Diseases & Arthropathies (553 , 554)	43.4%	8	\$58,700,254		
Female Reproductive System Reconstructive Procedures (748)	41.1%	8	\$56,957,506		
Major Skin Disorders (595 , 596)	44.8%	6	\$56,423,326		
Seizures (100 , 101)	15.8%	24	\$56,146,523	9.1%	(2.2%) - 33.7%
Laparoscopic Cholecystectomy W/O C.D.E. (417 , 418 , 419)	9.4%	22	\$55,289,069	7.4%	(5.1%) - 23.9%
Medical Back Problems (551 , 552)	7.1%	31	\$54,705,059	1.6%	4.0% - 10.3%
Dysequilibrium (149)	30.5%	9	\$52,979,219		
Major Gastrointestinal Disorders & Peritoneal Infections (371 , 372 , 373)	6.0%	30	\$51,179,059	3.1%	0.0% - 12.1%
Major Shoulder Or Elbow Joint Procedures (507 , 508)	100.0%	2	\$51,133,670	0.0%	100.0% -100.0%
Acute & Subacute Endocarditis (288 , 289 , 290)	34.8%	3	\$49,174,755		
Acute Adjustment Reaction & Psychosocial Dysfunction (880)	95.6%	4	\$48,500,802		

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
Nonspecific Cerebrovascular Disorders (070 , 071 , 072)	20.3%	9	\$48,454,270		
Diabetes (637 , 638 , 639)	8.8%	35	\$47,662,048	1.0%	6.9% - 10.8%
Respiratory Neoplasms (180 , 181 , 182)	9.3%	19	\$47,381,730		
Concussion (088 , 089 , 090)	66.4%	2	\$47,001,195		
Trauma To The Skin, Subcut Tiss & Breast (604 , 605)	36.2%	7	\$46,264,696		
Other Circulatory System Diagnoses (314 , 315 , 316)	4.6%	36	\$44,712,102	2.7%	(0.8%) - 9.9%
Other Disorders Of The Eye (124 , 125)	46.1%	3	\$42,192,645		
Thyroid, Parathyroid & Thyroglossal Procedures (625 , 626 , 627)	60.4%	5	\$39,336,595		
Other Respiratory System Diagnoses (205 , 206)	11.5%	15	\$38,696,319	5.4%	0.9% - 22.1%
Atherosclerosis (302 , 303)	19.8%	21	\$38,568,621	1.0%	17.9% - 21.7%
Cellulitis (602 , 603)	3.1%	59	\$37,209,835	1.1%	1.0% - 5.2%
Skin Graft &/Or Debrid For Skn Ulcer Or Cellulitis (573 , 574 , 575)	22.7%	7	\$35,650,544		
G.I. Obstruction (388 , 389 , 390)	5.8%	34	\$34,052,189	0.6%	4.5% - 7.1%
Fx, Sprn, Strn & Disl Except Femur, Hip, Pelvis & Thigh (562 , 563)	52.3%	8	\$33,056,555		
Other Skin, Subcut Tiss & Breast Proc (579 , 580 , 581)	50.0%	5	\$32,240,695		
Other Digestive System Diagnoses (393 , 394 , 395)	4.2%	34	\$31,635,623	2.2%	(0.0%) - 8.5%
Soft Tissue Procedures (500 , 501 , 502)	100.0%	2	\$31,405,456		
Hypertension (304 , 305)	22.2%	13	\$29,935,950		
Major Cardiovasc Procedures (237 , 238)	2.3%	19	\$29,919,348	0.1%	2.0% - 2.6%
Prostatic O.R. Procedure Unrelated To Principal Diagnosis (984 , 985 , 986)	100.0%	1	\$29,291,261		
Respiratory System Diagnosis W Ventilator Support 96+ Hours (207)	1.7%	11	\$28,758,630	0.1%	1.5% - 2.0%
Bronchitis & Asthma (202 , 203)	13.2%	18	\$28,067,566	4.7%	3.9% - 22.5%
Respiratory Signs & Symptoms (204)	38.8%	8	\$25,767,895		
Angina Pectoris (311)	18.9%	8	\$25,646,512	3.0%	13.0% - 24.8%
Interstitial Lung Disease (196 , 197 , 198)	23.1%	10	\$25,208,058	2.4%	18.3% - 27.9%
Chemotherapy W/O Acute Leukemia As Secondary Diagnosis (846 , 847 , 848)	16.8%	6	\$23,802,220		
Malignancy, Female Reproductive System (754 , 755 , 756)	28.0%	2	\$23,259,409		
Benign Prostatic Hypertrophy (725 , 726)	77.5%	2	\$23,085,959		
Hernia Procedures Except Inguinal & Femoral (353 , 354 , 355)	12.8%	8	\$21,112,731	6.7%	(0.4%) - 25.9%
O.R. Procedures For Obesity (619 , 620 , 621)	12.2%	5	\$20,421,412		

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.

The CERT program is unable to calculate provider compliance error 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 Error Rate
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Internal Medicine	16.8%	\$1,587,207,361	2,843	13.0% - 20.5%	24.1%
Cardiology	12.5%	\$750,315,805	1,440	9.9% - 15.1%	22.2%
Clinical Laboratory (Billing Independently)	19.3%	\$745,963,591	1,755	13.8% - 24.8%	25.6%
Family Practice	12.1%	\$619,927,174	2,065	10.3% - 13.8%	21.0%
Diagnostic Radiology	9.5%	\$406,031,331	1,792	6.9% - 12.1%	14.6%
Neurology	23.8%	\$295,971,006	239	11.7% - 35.9%	32.7%
Chiropractic	44.1%	\$263,038,123	647	38.2% - 50.0%	54.0%
Physical Therapist in Private Practice	16.5%	\$251,485,089	608	12.8% - 20.3%	22.5%
Orthopedic Surgery	9.6%	\$240,902,773	452	6.8% - 12.4%	32.0%
Radiation Oncology	16.5%	\$239,186,228	113	(2.6%) - 35.6%	18.0%
Pulmonary Disease	15.9%	\$229,093,838	337	12.4% - 19.4%	23.6%
Gastroenterology	11.3%	\$222,909,428	275	5.4% - 17.3%	22.2%
Nephrology	13.6%	\$219,511,169	285	8.0% - 19.3%	16.7%
Medical Oncology	22.3%	\$193,176,726	96	1.3% - 43.3%	22.4%
Hematology/Oncology	6.1%	\$159,300,545	346	4.4% - 7.8%	9.9%
Emergency Medicine	7.4%	\$157,926,686	553	5.4% - 9.4%	13.6%
General Surgery	8.8%	\$145,926,473	263	6.3% - 11.2%	15.9%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	3.1%	\$144,993,993	358	0.8% - 5.3%	13.7%
Podiatry	7.9%	\$143,326,414	558	5.1% - 10.8%	21.3%
Psychiatry	15.7%	\$123,884,531	276	12.5% - 18.8%	25.9%
Ophthalmology	2.1%	\$122,918,656	694	1.3% - 2.8%	8.4%
All Provider Types With Less Than 30 Claims	6.9%	\$118,628,835	280	4.7% - 9.2%	14.9%
Urology	8.2%	\$116,803,921	297	6.1% - 10.3%	15.1%
Dermatology	5.6%	\$114,290,131	306	0.4% - 10.8%	12.7%
Nurse Practitioner	8.9%	\$99,315,223	537	6.1% - 11.8%	17.6%
Pathology	8.8%	\$98,273,753	236	1.4% - 16.2%	13.3%
Endocrinology	24.1%	\$96,639,376	103	4.0% - 44.2%	27.7%
Infectious Disease	10.9%	\$85,619,690	100	8.8% - 13.0%	10.7%

Otolaryngology	9.4%	\$76,016,308	169	6.6% - 12.3%	14.3%
Physical Medicine and Rehabilitation	11.3%	\$71,563,630	170	8.8% - 13.8%	30.2%
Obstetrics/Gynecology	11.4%	\$70,173,987	116	7.3% - 15.4%	17.4%
Anesthesiology	4.6%	\$68,424,099	239	1.8% - 7.4%	7.8%
General Practice	12.0%	\$65,569,314	160	8.1% - 15.8%	22.3%
Rheumatology	12.8%	\$61,407,337	118	9.6% - 15.9%	16.0%
Clinical Social Worker	22.4%	\$59,944,041	102	16.2% - 28.5%	30.3%
Clinical Psychologist	16.8%	\$56,023,064	88	1.0% - 32.5%	22.1%
Physician Assistant	6.7%	\$52,315,096	311	3.3% - 10.2%	14.7%
Ambulatory Surgical Center	1.7%	\$46,120,667	105	0.5% - 2.9%	8.4%
Optometry	5.6%	\$39,999,967	235	2.1% - 9.1%	20.4%
Neurosurgery	3.9%	\$32,365,748	51	3.6% - 4.2%	36.9%
Independent Diagnostic Testing Facility (IDTF)	3.6%	\$30,364,879	89	1.2% - 6.1%	61.1%
Interventional Pain Management	7.5%	\$27,449,486	75	5.1% - 9.9%	12.0%
Vascular Surgery	2.6%	\$24,758,330	75	1.7% - 3.5%	6.0%
Geriatric Medicine	10.2%	\$21,055,956	64	6.0% - 14.4%	14.6%
Portable X-Ray Supplier (Billing Independently)	12.0%	\$18,370,076	50	9.6% - 14.4%	32.6%
Occupational Therapist in Private Practice	16.8%	\$18,284,652	38	13.4% - 20.2%	20.5%
Interventional Radiology	12.0%	\$13,030,630	35	10.4% - 13.6%	6.8%
Allergy/Immunology	9.2%	\$10,250,086	57	5.8% - 12.7%	10.9%
Plastic and Reconstructive Surgery	4.3%	\$9,196,941	32	3.3% - 5.3%	6.4%
Certified Registered Nurse Anesthetist (CRNA)	1.4%	\$8,952,189	130	0.0% - 2.8%	4.2%
Hematology	3.7%	\$6,802,619	31	2.8% - 4.7%	18.9%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	\$0	116	0.0% - 0.0%	19.7%
All Provider Types	10.5%	\$8,881,006,974	20,494	9.6% - 11.5%	19.7%

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

Provider Types Billing to DME	Improper Payment Rate				Provider Compliance Error Rate
	Improper Payment Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Medical supply company not included in 51, 52, or 53	73.2%	\$2,933,887,893	3,074	69.1% - 77.3%	73.9%
Pharmacy	64.0%	\$2,436,408,630	3,473	58.5% - 69.6%	64.9%
Medical Supply Company with Respiratory Therapist	64.7%	\$577,124,886	953	52.7% - 76.8%	66.7%
Individual orthotic personnel certified by an accrediting organization	65.5%	\$176,319,851	52	28.0% - 103.0%	66.6%
All Provider Types With Less Than 30 Claims	54.4%	\$149,839,773	180	40.7% - 68.1%	78.9%
Podiatry	75.8%	\$91,823,802	73	63.7% - 88.0%	80.8%
Unknown Supplier/Provider	54.0%	\$67,862,031	112	36.9% - 71.1%	54.4%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	80.0%	\$63,743,630	62	69.7% - 90.2%	84.1%
Medical supply company with orthotic personnel certified by an accrediting organization	68.3%	\$47,911,863	58	50.2% - 86.4%	82.7%
Orthopedic Surgery	12.6%	\$7,375,832	39	(0.6%) - 25.7%	12.8%
Ophthalmology	4.3%	\$882,930	34	(1.8%) - 10.4%	20.2%
All Provider Types	67.4%	\$6,553,181,121	8,110	64.2% - 70.6%	69.6%

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
OPPS, Laboratory (an FI), Ambulatory (Billing an FI)	5.4%	\$1,797,770,181	9,488	4.5% - 6.4%
HHA	7.0%	\$1,505,756,407	1,232	5.4% - 8.7%
SNF	4.9%	\$1,273,597,781	1,175	3.1% - 6.6%
Hospice	2.8%	\$413,199,961	536	0.9% - 4.8%
ESRD	4.9%	\$397,655,251	410	3.3% - 6.5%
Critical Access Hospital (CAH) Outpatient Services	8.7%	\$263,043,086	1,088	6.6% - 10.8%
Inpatient Rehab Unit	5.4%	\$134,179,508	44	3.1% - 7.6%
Inpatient Psychiatric Hospitals	6.1%	\$45,408,564	32	4.7% - 7.5%
Outpatient Rehab Facility (ORF)	9.0%	\$43,698,843	174	5.8% - 12.2%
FQHC	5.8%	\$34,091,708	369	3.1% - 8.4%
RHCs	3.4%	\$24,974,155	924	2.1% - 4.7%
All Codes With Less Than 30 Claims	1.7%	\$22,567,175	40	(1.6%) - 4.9%
Inpatient Rehabilitation Hospitals	0.9%	\$16,968,060	37	(0.9%) - 2.8%
Comprehensive Outpatient Rehab Facility (CORF)	12.8%	\$6,443,700	47	0.8% - 24.8%
Community Mental Health Center (CMHC)	2.0%	\$5,119,079	52	1.3% - 2.7%
Inpatient Critical Access Hospital	0.0%	\$0	117	0.0% - 0.0%
Overall	5.1%	\$5,984,473,459	15,765	4.5% - 5.8%

**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	10.1%	\$11,702,380,782	3,754	8.6% - 11.6%
Other FI Service Types	13.8%	\$307,683,899	83	8.7% - 18.8%
DRG Long Term	0.4%	\$29,833,486	35	(0.1%) - 1.0%
Overall	9.6%	\$12,039,898,168	3,872	8.2% - 11.0%

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

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	44.1%	647	0.3%	72.9%	26.5%	0.2%	0.2%
Endocrinology	24.1%	103	3.1%	67.4%	4.1%	25.4%	0.0%
Neurology	23.8%	239	18.9%	54.6%	1.3%	25.3%	0.0%
Clinical Social Worker	22.4%	102	2.4%	93.0%	4.6%	0.0%	0.0%
Medical Oncology	22.3%	96	0.1%	96.5%	0.1%	3.3%	0.0%
Clinical Laboratory (Billing Independently)	19.3%	1,755	0.5%	93.6%	5.0%	0.7%	0.2%
Occupational Therapist in Private Practice	16.8%	38	0.0%	88.1%	0.0%	11.9%	0.0%
Internal Medicine	16.8%	2,843	17.6%	46.1%	0.9%	35.2%	0.1%
Clinical Psychologist	16.8%	88	0.0%	93.8%	6.2%	0.0%	0.0%
Physical Therapist in Private Practice	16.5%	608	2.8%	89.1%	0.4%	7.1%	0.5%
Radiation Oncology	16.5%	113	9.3%	88.5%	0.0%	2.2%	0.0%
Pulmonary Disease	15.9%	337	1.8%	44.1%	0.2%	53.8%	0.0%
Psychiatry	15.7%	276	8.0%	53.7%	0.0%	38.3%	0.0%
Nephrology	13.6%	285	6.8%	41.5%	0.1%	51.6%	0.0%
Rheumatology	12.8%	118	23.2%	34.4%	13.3%	29.1%	0.0%
Cardiology	12.5%	1,440	1.3%	63.9%	6.9%	27.8%	0.1%
Family Practice	12.1%	2,065	2.9%	52.8%	2.4%	41.1%	0.8%
Portable X-Ray Supplier (Billing Independently)	12.0%	50	0.0%	35.5%	64.5%	0.0%	0.0%
Interventional Radiology	12.0%	35	0.0%	100.0%	0.0%	0.0%	0.0%
General Practice	12.0%	160	0.3%	63.4%	0.9%	35.4%	0.0%
Obstetrics/Gynecology	11.4%	116	0.2%	35.9%	0.1%	63.8%	0.0%
Gastroenterology	11.3%	275	0.0%	48.5%	0.1%	51.4%	0.0%
Physical Medicine and Rehabilitation	11.3%	170	2.5%	53.0%	0.1%	44.4%	0.0%
Infectious Disease	10.9%	100	0.0%	68.8%	0.0%	31.2%	0.0%
Geriatric Medicine	10.2%	64	0.0%	1.0%	0.0%	99.0%	0.0%
Orthopedic Surgery	9.6%	452	0.0%	62.4%	0.0%	37.6%	0.0%
Diagnostic Radiology	9.5%	1,792	1.5%	93.9%	3.3%	1.2%	0.0%
Otolaryngology	9.4%	169	0.0%	44.3%	0.1%	55.6%	0.0%
Allergy/Immunology	9.2%	57	0.0%	46.3%	0.0%	53.7%	0.0%
Nurse Practitioner	8.9%	537	10.9%	49.8%	0.3%	38.5%	0.5%
Pathology	8.8%	236	0.0%	98.2%	0.5%	1.4%	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
General Surgery	8.8%	263	0.0%	31.3%	0.1%	68.6%	0.0%
Urology	8.2%	297	0.1%	74.9%	0.1%	24.9%	0.0%
Podiatry	7.9%	558	0.0%	64.3%	4.1%	31.4%	0.2%
Interventional Pain Management	7.5%	75	0.0%	69.6%	14.1%	16.3%	0.0%
Emergency Medicine	7.4%	553	0.0%	33.7%	0.6%	65.2%	0.4%
All Provider Types With Less Than 30 Claims	6.9%	280	0.4%	56.2%	3.6%	39.8%	0.0%
Physician Assistant	6.7%	311	0.0%	54.5%	0.4%	45.1%	0.0%
Hematology/Oncology	6.1%	346	2.1%	49.1%	0.6%	48.2%	0.0%
Optometry	5.6%	235	5.3%	54.2%	0.0%	40.5%	0.0%
Dermatology	5.6%	306	0.0%	79.7%	1.2%	19.1%	0.0%
Anesthesiology	4.6%	239	0.7%	55.5%	12.3%	31.5%	0.0%
Plastic and Reconstructive Surgery	4.3%	32	0.0%	20.6%	0.0%	79.4%	0.0%
Neurosurgery	3.9%	51	11.7%	2.6%	0.0%	85.7%	0.0%
Hematology	3.7%	31	0.0%	11.5%	1.9%	86.6%	0.0%
Independent Diagnostic Testing Facility (IDTF)	3.6%	89	0.0%	98.7%	1.3%	0.0%	0.0%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	3.1%	358	52.1%	23.3%	20.9%	3.7%	0.0%
Vascular Surgery	2.6%	75	9.2%	46.5%	0.0%	44.4%	0.0%
Ophthalmology	2.1%	694	1.0%	68.6%	1.1%	29.4%	0.0%
Ambulatory Surgical Center	1.7%	105	0.0%	77.4%	17.7%	4.9%	0.0%
Certified Registered Nurse Anesthetist (CRNA)	1.4%	130	0.0%	100.0%	0.0%	0.0%	0.0%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	116	N/A	N/A	N/A	N/A	N/A
All Provider Types	10.5%	20,494	6.2%	62.1%	3.4%	28.1%	0.1%

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
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	80.0%	62	0.0%	100.0%	0.0%	0.0%	0.0%
Podiatry	75.8%	73	3.4%	91.0%	5.5%	0.0%	0.0%
Medical supply company not included in 51, 52, or 53	73.2%	3,074	0.4%	85.3%	11.4%	0.7%	2.3%
Medical supply company with orthotic personnel certified by an accrediting organization	68.3%	58	0.0%	100.0%	0.0%	0.0%	0.0%
Individual orthotic personnel certified by an accrediting organization	65.5%	52	0.5%	99.0%	0.4%	0.0%	0.0%
Medical Supply Company with Respiratory Therapist	64.7%	953	0.7%	91.4%	7.2%	0.6%	0.1%
Pharmacy	64.0%	3,473	0.3%	96.8%	2.5%	0.2%	0.1%
All Provider Types With Less Than 30 Claims	54.4%	180	1.3%	92.4%	5.6%	0.7%	0.0%
Unknown Supplier/Provider	54.0%	112	1.5%	89.1%	3.9%	0.0%	5.6%
Orthopedic Surgery	12.6%	39	0.0%	100.0%	0.0%	0.0%	0.0%
Ophthalmology	4.3%	34	41.7%	58.3%	0.0%	0.0%	0.0%
All Provider Types	67.4%	8,110	0.4%	91.0%	6.9%	0.5%	1.1%

**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
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	80.0%	62	0.0%	100.0%	0.0%	0.0%	0.0%
Podiatry	75.8%	73	3.4%	91.0%	5.5%	0.0%	0.0%
Medical supply company not included in 51, 52, or 53	73.2%	3,074	0.4%	85.3%	11.4%	0.7%	2.3%
Medical supply company with orthotic personnel certified by an accrediting organization	68.3%	58	0.0%	100.0%	0.0%	0.0%	0.0%
Individual orthotic personnel certified by an accrediting organization	65.5%	52	0.5%	99.0%	0.4%	0.0%	0.0%
Medical Supply Company with Respiratory Therapist	64.7%	953	0.7%	91.4%	7.2%	0.6%	0.1%
Pharmacy	64.0%	3,473	0.3%	96.8%	2.5%	0.2%	0.1%
All Provider Types With Less Than 30 Claims	54.4%	180	1.3%	92.4%	5.6%	0.7%	0.0%
Unknown Supplier/Provider	54.0%	112	1.5%	89.1%	3.9%	0.0%	5.6%
Orthopedic Surgery	12.6%	39	0.0%	100.0%	0.0%	0.0%	0.0%
Ophthalmology	4.3%	34	41.7%	58.3%	0.0%	0.0%	0.0%
All Provider Types	67.4%	8,110	0.4%	91.0%	6.9%	0.5%	1.1%

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	13.8%	83	0.0%	42.0%	57.8%	0.1%	0.0%
DRG Short Term	10.1%	3,754	1.3%	11.1%	76.4%	11.0%	0.3%
DRG Long Term	0.4%	35	0.0%	0.0%	44.5%	55.5%	0.0%
All Provider Types	9.6%	3,872	1.2%	11.9%	75.8%	10.8%	0.3%

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	47.40%
2009	882	433	49.10%
2010	697	366	52.5%
2011	611	316	51.7%

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	14.10%
2009	3,342	617	18.50%
2010	2,829	569	20.1%
2011	2,316	404	17.4%

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	11.60%
2009	2,180	326	15.00%
2010	1,693	290	17.1%
2011	1,600	240	15.0%

Table H4: E&M Codes with More than 2,000 Claims Reviewed

Part B Provider Type	Improper Payment Rate				Provider Compliance Error Rate
	Improper Payment Rate	Projected Improper Payments	Number of Claims in Sample	95% Confidence Interval	
99214	9.4%	\$595,494,395	2,304	8.3% - 10.6%	15.4%
99213	6.5%	\$357,662,606	2,279	5.2% - 7.9%	12.7%

Table H5 provides information on the impact of one-level disagreement between Carriers/Part B MACs and providers when coding E&M services.

Table H5: Impact of One Level E&M (Top 20)

Final E & M Codes	Incorrect Coding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Office/outpatient visit, est (99214)	5.3%	\$332,353,600	4.6% - 5.9%
Subsequent hospital care (99233)	12.0%	\$196,049,330	9.5% - 14.5%
Office/outpatient visit, new (99204)	10.3%	\$116,484,529	5.8% - 14.8%
Office/outpatient visit, est (99215)	9.3%	\$93,478,166	7.8% - 10.8%
Office/outpatient visit, est (99213)	1.7%	\$90,919,565	1.2% - 2.1%
Emergency dept visit (99285)	6.4%	\$73,922,780	4.9% - 7.9%
Subsequent hospital care (99232)	2.5%	\$71,342,088	1.4% - 3.5%
Initial hospital care (99222)	9.2%	\$63,457,707	7.2% - 11.3%
Office/outpatient visit, new (99203)	7.2%	\$56,695,709	5.1% - 9.3%
Initial hospital care (99223)	2.7%	\$52,145,660	1.7% - 3.6%
Office/outpatient visit, est (99212)	5.3%	\$29,841,824	3.5% - 7.1%
Nursing fac care, subseq (99309)	5.5%	\$27,665,217	4.1% - 6.9%
Subsequent hospital care (99231)	5.1%	\$23,226,068	1.0% - 9.3%
Emergency dept visit (99284)	3.7%	\$21,862,529	1.0% - 6.4%
Hospital discharge day (99239)	5.1%	\$13,464,705	4.1% - 6.1%
Office/outpatient visit, new (99205)	2.5%	\$10,239,040	0.2% - 4.8%
Nursing fac care, subseq (99308)	1.6%	\$7,851,123	0.7% - 2.4%
Emergency dept visit (99283)	4.7%	\$7,180,446	2.1% - 7.4%
Nursing fac care, subseq (99307)	2.9%	\$4,075,822	1.2% - 4.6%
Office/outpatient visit, new (99202)	0.6%	\$923,823	0.1% - 1.1%
All Other Codes	0.1%	\$44,748,866	0.0% - 0.1%
Overall	1.6%	\$1,337,928,599	1.4% - 1.7%

Tables H6 through H9 list the top twenty services with the highest dollars in error due to overcoding. 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 H6: Services with Overcoding Errors: Part B

Service Billed to Part B (HCPCS)	Overcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Office visits - established	4.4%	\$596,339,432	4.0% - 4.9%
Hospital visit - initial	16.8%	\$479,778,085	14.8% - 18.9%
Office visits - new	16.6%	\$422,299,995	13.5% - 19.6%
Hospital visit - subsequent	6.8%	\$382,316,910	5.4% - 8.1%
Nursing home visit	7.9%	\$138,268,018	6.0% - 9.8%
Emergency room visit	5.1%	\$98,497,225	3.8% - 6.4%
Hospital visit - critical care	6.6%	\$55,018,138	(1.5%) - 14.7%
Other drugs	0.8%	\$36,335,302	(0.6%) - 2.2%
Consultations	15.5%	\$26,805,427	10.2% - 20.8%
Dialysis services (Medicare Fee Schedule)	3.0%	\$23,373,927	2.0% - 4.0%
Minor procedures - other (Medicare fee schedule)	0.5%	\$15,310,020	0.1% - 0.9%
Lab tests - blood counts	2.8%	\$9,547,696	2.2% - 3.4%
Ambulance	0.1%	\$4,905,520	(0.0%) - 0.2%
Imaging/procedure - other	1.5%	\$3,789,928	(0.9%) - 4.0%
Home visit	1.8%	\$3,455,440	0.1% - 3.5%
Other tests - other	0.2%	\$3,068,692	(0.1%) - 0.6%
Other tests - electrocardiograms	0.7%	\$2,635,988	(0.7%) - 2.1%
Ambulatory procedures - skin	0.1%	\$2,480,835	0.0% - 0.2%
Advanced imaging - CAT/CT/CTA: other	0.2%	\$2,120,412	(0.2%) - 0.5%
Lab tests - other (Medicare fee schedule)	0.1%	\$1,349,965	(0.1%) - 0.2%
All Other Codes	0.0%	\$6,507,606	0.0% - 0.0%
Overall	2.7%	\$2,314,204,561	2.5% - 3.0%

Table H7: Services with Overcoding Errors: DME

Service Billed to DME (HCPCS)	Overcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Surgical Dressings	8.6%	\$18,182,230	(2.6%) - 19.8%
Hospital Beds/Accessories	1.7%	\$3,325,418	(0.0%) - 3.5%
Oxygen Supplies/Equipment	0.2%	\$3,214,812	(0.0%) - 0.4%
Immunosuppressive Drugs	0.4%	\$1,573,899	(0.2%) - 1.0%
Upper Limb Orthoses	1.7%	\$1,358,185	(1.1%) - 4.5%
Glucose Monitor	0.1%	\$965,641	(0.1%) - 0.2%
Nebulizers & Related Drugs	0.1%	\$938,090	(0.1%) - 0.3%
Lower Limb Orthoses	0.2%	\$699,010	(0.2%) - 0.7%
Support Surfaces	0.7%	\$584,135	(0.7%) - 2.1%
All Policy Groups with Less than 30 Claims	0.0%	\$342,723	(0.0%) - 0.1%
Overall	0.3%	\$31,184,143	0.0% - 0.6%

Table H8: Services with Overcoding Errors: Part A Excluding Inpatient Hospital PPS

Service Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Overcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
SNF Inpatient	0.7%	\$177,501,706	0.4% - 1.1%
Home Health	0.3%	\$67,154,733	0.1% - 0.5%
Hospital Outpatient	0.1%	\$42,408,331	0.0% - 0.2%
Critical Access Hospital	0.2%	\$5,827,189	(0.1%) - 0.5%
Clinic ESRD	0.0%	\$3,839,334	(0.0%) - 0.1%
Hospital Other Part B	0.3%	\$1,478,625	0.2% - 0.4%
SNF Inpatient Part B	0.1%	\$1,225,680	(0.0%) - 0.2%
Clinic CORF	1.3%	\$662,195	(1.0%) - 3.6%
Clinic OPT	0.1%	\$337,232	0.0% - 0.1%
Hospital Inpatient Part B	0.1%	\$202,188	(0.0%) - 0.2%
SNF Outpatient	0.1%	\$152,297	(0.1%) - 0.2%
Overall	0.3%	\$300,789,510	0.2% - 0.3%

Table H9: Services with Overcoding Errors: Part A Inpatient Hospital PPS

Service Billed to Part A Inpatient Hospital PPS (Type of Bill)	Overcoding Errors		
	Improper Payment Rate	Projected Improper Payments	95% Confidence Interval
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	1.9%	\$107,844,496	(0.4%) - 4.2%
Craniotomy & Endovascular Intracranial Procedures (025 , 026 , 027)	4.1%	\$61,983,228	3.9% - 4.2%
Disorders Of Liver Except Malig.cirr,alc Hepa (441 , 442 , 443)	13.4%	\$56,506,619	10.4% - 16.3%
Acute & Subacute Endocarditis (288 , 289 , 290)	34.8%	\$49,174,755	. - .
Other Disorders Of The Eye (124 , 125)	42.3%	\$38,727,847	. - .
G.I. Hemorrhage (377 , 378 , 379)	2.4%	\$38,160,479	(2.0%) - 6.7%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	1.1%	\$37,305,135	0.3% - 1.8%
Major Cardiovasc Procedures (237 , 238)	2.3%	\$29,919,348	2.0% - 2.6%
Other Kidney & Urinary Tract Diagnoses (698 , 699 , 700)	4.3%	\$26,226,198	4.0% - 4.6%
Heart Failure & Shock (291 , 292 , 293)	0.5%	\$23,632,720	(0.1%) - 1.2%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	0.8%	\$23,177,861	(0.0%) - 1.6%
Kidney & Urinary Tract Infections (689 , 690)	1.3%	\$21,682,793	0.9% - 1.6%
Cardiac Defibrillator Implant W/O Cardiac Cath (226 , 227)	2.7%	\$19,669,843	(2.4%) - 7.8%
Major Skin Disorders (595 , 596)	15.5%	\$19,446,599	. - .
Disorders Of Pancreas Except Malignancy (438 , 439 , 440)	3.1%	\$19,296,685	2.4% - 3.9%
Pancreas, Liver & Shunt Procedures (405 , 406 , 407)	7.4%	\$18,604,203	. - .
Extensive O.R. Procedure Unrelated To Principal Diagnosis (981 , 982 , 983)	0.5%	\$18,098,738	(0.4%) - 1.4%
Nonspecific Cerebrovascular Disorders (070 , 071 , 072)	7.1%	\$16,918,375	. - .
Septicemia Or Severe Sepsis W Mv 96+ Hours (870)	2.5%	\$16,539,086	. - .
Cellulitis (602 , 603)	1.3%	\$15,011,867	0.9% - 1.6%
All Other Codes	0.2%	\$142,084,220	0.1% - 0.2%
Overall	0.6%	\$800,011,097	0.4% - 0.9%

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.

Table I1: Service Specific Overpayment Rates: Part B

Service Billed to Part B (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
All Codes With Less Than 30 Claims	5,561	8,888	\$68,983	\$854,782	\$2,627,694,055	8.0%
Office/outpatient visit, est (99214)	2,304	2,316	\$17,457	\$203,938	\$594,359,389	9.4%
Initial hospital care (99223)	401	402	\$19,388	\$70,490	\$539,248,247	27.5%
Subsequent hospital care (99233)	431	610	\$14,250	\$58,133	\$427,863,276	26.2%
Subsequent hospital care (99232)	967	1,590	\$14,529	\$108,708	\$371,101,572	12.8%
Office/outpatient visit, est (99213)	2,279	2,293	\$7,430	\$133,977	\$304,808,202	5.6%
Office/outpatient visit, new (99204)	211	211	\$5,557	\$27,815	\$263,263,100	23.3%
Office/outpatient visit, est (99215)	320	322	\$8,801	\$39,277	\$224,147,980	22.3%
Critical care, first hour (99291)	121	153	\$5,916	\$31,930	\$171,782,541	21.8%
Initial hospital care (99222)	181	181	\$5,207	\$21,872	\$168,285,383	24.5%
Therapeutic exercises (97110)	641	752	\$6,491	\$34,760	\$167,916,086	18.7%
Chiropractic manipulation (98941)	453	610	\$6,892	\$16,969	\$160,823,687	42.0%
Tte w/doppler, complete (93306)	266	267	\$4,429	\$33,058	\$132,566,354	15.2%
Office/outpatient visit, new (99203)	251	251	\$3,398	\$21,542	\$122,785,692	15.6%
bls (A0428)	161	167	\$2,796	\$31,708	\$89,843,691	6.5%
Emergency dept visit (99285)	309	309	\$4,486	\$49,414	\$89,059,167	7.7%
Office/outpatient visit, new (99205)	63	63	\$2,184	\$10,276	\$83,247,742	20.4%
Nursing fac care, subseq (99309)	230	243	\$2,624	\$17,773	\$83,180,958	16.5%
Psytx, off, 45-50 min (90806)	113	149	\$1,598	\$7,540	\$77,383,278	27.3%
Esrdsrv, 4 visits p mo, 20+ (90960)	37	37	\$1,150	\$10,141	\$71,748,515	17.4%
All Other Codes	11,401	19,876	\$57,705	\$609,216	\$1,932,030,068	8.5%
Combined	20,494	39,690	\$261,269	\$2,393,318	\$8,703,138,982	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
All Codes With Less Than 30 Claims	1,769	2,742	\$300,255	\$531,107	\$2,212,120,825	57.8%
Oxygen concentrator (E1390)	1,258	1,293	\$148,631	\$193,810	\$1,133,180,723	77.7%
Blood glucose/reagent strips (A4253)	1,457	1,466	\$126,344	\$150,622	\$929,031,554	84.4%
Hosp bed semi-electr w/ matt (E0260)	227	232	\$19,078	\$21,779	\$135,908,667	88.5%
Budesonide non-comp unit (J7626)	72	74	\$13,555	\$24,420	\$106,061,471	57.9%
Tacrolimus oral per 1 MG (J7507)	68	72	\$16,147	\$31,803	\$104,040,006	52.4%
Lancets per box (A4259)	852	858	\$12,940	\$15,323	\$99,822,219	84.8%
Cont airway pressure device (E0601)	303	318	\$12,665	\$21,987	\$98,014,011	60.1%
Portable gaseous O2 (E0431)	634	658	\$12,774	\$16,517	\$97,194,278	77.4%
Diab shoe for density insert (A5500)	125	136	\$11,949	\$15,420	\$88,965,667	78.2%
Multi den insert direct form (A5512)	78	84	\$9,561	\$11,631	\$71,586,004	81.8%
Enteral feed supp pump per d (B4035)	67	68	\$8,452	\$14,853	\$66,560,532	58.2%
RAD w/o backup non-inv intfc (E0470)	68	75	\$9,264	\$13,079	\$64,412,596	69.8%
CPAP full face mask (A7030)	81	81	\$8,336	\$12,774	\$64,248,424	65.6%
Nasal application device (A7034)	145	145	\$9,043	\$14,366	\$62,469,031	62.0%
High strength ltwt whlchr (K0004)	84	88	\$7,870	\$8,315	\$61,980,799	94.9%
Disp fee inhal drugs/30 days (Q0513)	386	389	\$7,590	\$12,210	\$57,749,018	62.0%
Multi den insert custom mold (A5513)	45	52	\$7,333	\$9,366	\$54,355,934	80.5%
Lightweight wheelchair (K0003)	114	115	\$6,995	\$7,503	\$52,201,255	92.6%
Mycophenolate mofetil oral (J7517)	43	43	\$7,669	\$12,566	\$49,929,224	64.1%
All Other Codes	3,482	4,795	\$125,245	\$194,402	\$943,311,918	65.9%
Combined	8,110	13,784	\$881,693	\$1,333,852	\$6,553,144,155	67.4%

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
Hospital Outpatient	8,248	\$176,241	\$3,388,831	\$1,518,118,089	4.8%
Home Health	1,199	\$216,655	\$3,065,591	\$1,491,122,659	7.0%
SNF Inpatient	844	\$194,554	\$4,281,322	\$1,128,392,273	4.7%
Clinic ESRD	410	\$48,465	\$1,001,738	\$397,095,855	4.9%
Nonhospital based hospice	459	\$32,916	\$1,426,311	\$292,306,913	2.3%
Critical Access Hospital	1,088	\$31,749	\$473,199	\$260,922,514	8.6%
Hospital Inpatient (Part A)	269	\$95,528	\$2,478,590	\$219,123,307	2.8%
Hospital Other Part B	1,150	\$11,425	\$43,274	\$199,212,262	41.1%
Hospital based hospice	77	\$7,196	\$223,822	\$120,893,048	6.8%
SNF Inpatient Part B	266	\$13,092	\$208,809	\$96,734,369	5.4%
Clinic OPT	174	\$2,796	\$58,746	\$43,424,511	8.9%
SNF Outpatient	65	\$2,116	\$38,182	\$27,685,967	11.9%
Clinical Rural Health	924	\$3,509	\$92,817	\$24,974,155	3.4%
Hospital Swing Bed	20	\$4,991	\$165,992	\$22,771,031	2.3%
Clinic – Freestanding (Effective April 1, 2010)	156	\$1,541	\$13,970	\$21,483,148	11.9%
Hospital Inpatient Part B	70	\$1,423	\$34,572	\$12,905,694	4.9%
Federally Qualified Health Centers (Effective April 1, 2010)	213	\$894	\$23,237	\$12,608,559	3.1%
Clinic CORF	47	\$1,391	\$11,386	\$6,443,700	12.8%
Community Mental Health Centers	52	\$393	\$47,300	\$5,119,079	2.0%
All Other Codes	34	\$0	\$6,989	\$0	0.0%
Combined	15,765	\$846,877	\$17,084,677	\$5,901,337,134	5.1%

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

Service Billed to Part A Inpatient Hospital PPS (MS-DRG)	Number of Claims in Sample	Dollars Overpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Overpaid	Overpayment Rate
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	143	\$258,527	\$1,875,540	\$637,533,653	11.4%
Circulatory Disorders Except Ami, W Card Cath W/O Mcc (287)	56	\$93,124	\$360,711	\$419,314,384	35.3%
Aicd Generator Procedures (245)	2	\$33,406	\$69,413	\$416,274,353	88.7%
Permanent Cardiac Pacemaker Implant W Cc (243)	16	\$97,145	\$277,143	\$370,201,782	37.1%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O Mcc (247)	47	\$130,502	\$460,229	\$323,601,668	23.9%
Permanent Cardiac Pacemaker Implant W/O Cc/Mcc (244)	16	\$79,475	\$208,674	\$313,485,449	44.8%
Perc Cardiovasc Proc W/O Coronary Artery Stent W/O Mcc (251)	13	\$38,191	\$150,767	\$272,750,499	34.6%
Other Vascular Procedures W Cc (253)	12	\$13,316	\$146,700	\$220,036,993	34.7%
Degenerative Nervous System Disorders W/O Mcc (057)	19	\$66,220	\$321,060	\$216,143,590	8.2%
Spinal Fusion Except Cervical W/O Mcc (460)	24	\$82,560	\$520,773	\$212,064,304	16.3%
Cardiac Defib Implant W Cardiac Cath W Ami/Hf/Shock W Mcc (222)	1	\$61,524	\$88,785	\$192,539,588	69.3%
Chest Pain (313)	57	\$72,848	\$162,613	\$191,126,667	30.6%
Psychoses (885)	89	\$97,865	\$703,782	\$188,174,836	9.2%
G.I. Hemorrhage W Cc (378)	44	\$32,274	\$274,224	\$178,248,585	24.2%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	76	\$58,185	\$305,035	\$177,828,740	22.1%
Chronic Obstructive Pulmonary Disease W/O Cc/Mcc (192)	36	\$42,869	\$151,805	\$167,072,802	27.0%
Cranial & Peripheral Nerve Disorders W/O Mcc (074)	9	\$18,627	\$46,052	\$164,353,496	71.4%
Syncope & Collapse (312)	61	\$37,484	\$272,785	\$161,279,762	19.0%
Cardiac Defibrillator Implant W/O Cardiac Cath W Mcc (226)	2	\$51,456	\$94,077	\$146,775,549	54.4%
Other Vascular Procedures W/O Cc/Mcc (254)	11	\$48,012	\$106,095	\$143,044,962	36.6%
All Other Codes	3,138	\$2,417,706	\$32,437,508	\$6,417,068,528	6.2%
Combined	3,872	\$3,831,315	\$39,033,769	\$11,528,920,192	9.2%

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	48,241	\$5,821,154	\$59,845,616	\$32,686,540,462	9.7%

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. 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 (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
Office/outpatient visit, est (99212)	483	485	\$1,654	\$16,757	\$53,509,583	9.5%
Office/outpatient visit, est (99213)	2,279	2,293	\$1,730	\$133,977	\$52,854,404	1.0%
Subsequent hospital care (99231)	220	348	\$656	\$12,780	\$23,226,068	5.1%
All Codes With Less Than 30 Claims	5,561	8,888	\$293	\$854,782	\$10,150,980	0.0%
Therapeutic exercises (97110)	641	752	\$261	\$34,760	\$6,569,763	0.7%
Initial hospital care (99222)	181	181	\$128	\$21,872	\$5,763,681	0.8%
Emergency dept visit (99283)	87	87	\$252	\$4,669	\$5,003,024	3.3%
Nursing fac care, subseq (99308)	174	194	\$99	\$10,774	\$4,459,726	0.9%
Nursing fac care, subseq (99307)	83	99	\$150	\$3,576	\$4,091,778	2.9%
Office/outpatient visit, est (99211)	207	209	\$121	\$3,399	\$3,576,618	2.9%
Ct head/brain w/o dye (70450)	117	118	\$32	\$5,273	\$1,373,397	0.6%
Office/outpatient visit, est (99214)	2,304	2,316	\$38	\$203,938	\$1,135,006	0.0%
Subsequent hospital care (99232)	967	1,590	\$37	\$108,708	\$1,042,945	0.0%
Manual therapy (97140)	371	425	\$26	\$12,813	\$1,026,411	0.3%
Office/outpatient visit, new (99203)	251	251	\$49	\$21,542	\$973,651	0.1%
Comprehen metabolic panel (80053)	629	629	\$6	\$7,011	\$840,575	0.3%
Triamcinolone acet inj NOS (J3301)	68	68	\$8	\$358	\$759,012	7.0%
Ground mileage (A0425)	352	358	\$8	\$26,944	\$461,752	0.0%
Complete cbc w/auto diff wbc (85025)	741	743	\$9	\$7,593	\$216,652	0.1%
Drain/inject, joint/bursa (20610)	105	116	\$22	\$7,846	\$121,775	0.0%
All Other Codes	12,375	19,540	\$111	\$893,947	\$711,192	0.0%
Combined	20,494	39,690	\$5,688	\$2,393,318	\$177,867,992	0.2%

Table J2: Service Specific Underpayment Rates: DME

Service Billed to DME (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
Lithium batt for glucose mon (A4235)	61	61	\$6	\$169	\$36,966	2.7%
Albuterol ipratrop non-comp (J7620)	206	206	\$0	\$5,531	\$0	0.0%
CPAP full face mask (A7030)	81	81	\$0	\$12,774	\$0	0.0%
Disp fee inhal drugs/30 days (Q0513)	386	389	\$0	\$12,210	\$0	0.0%
Dispense fee initial 30 day (G0333)	43	43	\$0	\$1,974	\$0	0.0%
Elevating whlchair leg rests (K0195)	104	107	\$0	\$1,474	\$0	0.0%
Enter feed supkit syr by day (B4034)	34	35	\$0	\$4,181	\$0	0.0%
Enteral infusion pump w/ ala (B9002)	40	52	\$0	\$4,445	\$0	0.0%
Infusion supplies with pump (A4222)	41	43	\$0	\$5,193	\$0	0.0%
Lancets per box (A4259)	852	858	\$0	\$15,323	\$0	0.0%
Maint drug infus cath per wk (A4221)	48	48	\$0	\$2,576	\$0	0.0%
Oxygen concentrator (E1390)	1,258	1,293	\$0	\$193,810	\$0	0.0%
Pos airway pressure tubing (A7037)	201	201	\$0	\$6,779	\$0	0.0%
Repair/svc DME non-oxygen eq (K0739)	40	40	\$0	\$2,258	\$0	0.0%
Replacement nasal pillows (A7033)	43	44	\$0	\$2,442	\$0	0.0%
Sup fee antiem,antica,immuno (Q0511)	92	93	\$0	\$2,168	\$0	0.0%
TENS suppl 2 lead per month (A4595)	41	42	\$0	\$2,091	\$0	0.0%
Walker folding wheeled w/o s (E0143)	106	108	\$0	\$8,817	\$0	0.0%
All Other Codes	6,798	10,040	\$0	\$1,049,638	\$0	0.0%
Combined	8,110	13,784	\$6	\$1,333,852	\$36,966	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	8,248	8,248	\$2,511	\$3,388,831	\$43,893,155	0.1%
SNF Inpatient	844	844	\$4,569	\$4,281,322	\$19,895,681	0.1%
Home Health	1,199	1,199	\$2,695	\$3,065,591	\$14,633,748	0.1%
Critical Access Hospital	1,088	1,088	\$471	\$473,199	\$2,120,572	0.1%
SNF Inpatient Part B	266	266	\$105	\$208,809	\$889,490	0.0%
Hospital Inpatient Part B	70	70	\$127	\$34,572	\$852,824	0.3%
Clinic ESRD	410	410	\$58	\$1,001,738	\$559,396	0.0%
Clinic OPT	174	174	\$45	\$58,746	\$274,332	0.1%
Hospital Other Part B	1,150	1,150	\$3	\$43,274	\$17,127	0.0%
All Other Codes	2,316	2,316	\$0	\$4,528,596	\$0	0.0%
Combined	15,765	15,765	\$10,582	\$17,084,677	\$83,136,326	0.1%

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

Service Billed to Part A Inpatient Hospital PPS (MS-DRG)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpayment Rate
Other Digestive System O.R. Procedures W Cc (357)	3	3	\$10,534	\$44,564	\$92,623,242	50.5%
Other Vascular Procedures W Mcc (252)	16	16	\$13,764	\$236,980	\$59,870,063	5.5%
Heart Failure & Shock W Cc (292)	83	83	\$6,570	\$488,740	\$35,028,965	2.2%
Cervical Spinal Fusion W/O Cc/Mcc (473)	14	14	\$3,662	\$152,426	\$30,508,817	6.0%
Respiratory System Diagnosis W Ventilator Support 96+ Hours (207)	11	11	\$8,179	\$354,973	\$28,758,630	1.7%
Heart Failure & Shock W Mcc (291)	77	77	\$9,180	\$718,425	\$28,186,235	1.2%
Simple Pneumonia & Pleurisy W Cc (194)	67	67	\$6,976	\$427,730	\$21,832,274	1.8%
Nutritional & Misc Metabolic Disorders W Mcc (640)	31	31	\$4,274	\$179,366	\$19,142,937	2.5%
Cardiac Arrhythmia & Conduction Disorders W/O Cc/Mcc (310)	41	41	\$7,784	\$131,241	\$18,604,480	4.7%
Major Male Pelvic Procedures W/O Cc/Mcc (708)	13	13	\$4,727	\$81,682	\$16,311,773	7.5%
Renal Failure W Cc (683)	38	38	\$4,268	\$245,643	\$15,179,521	2.0%
Bronchitis & Asthma W Cc/Mcc (202)	11	11	\$2,858	\$51,363	\$12,994,243	8.5%
Other Circulatory System Diagnoses W Cc (315)	12	12	\$2,948	\$68,082	\$12,821,339	3.7%
Renal Failure W Mcc (682)	35	35	\$1,773	\$362,450	\$11,823,432	1.1%
Anal & Stomal Procedures W Cc (348)	3	3	\$6,803	\$23,832	\$11,729,375	14.9%
Viral Illness W Mcc (865)	2	2	\$3,239	\$17,440	\$10,741,288	10.4%
Transurethral Procedures W Mcc (668)	5	5	\$3,770	\$76,075	\$10,630,708	5.2%
Lower Extrem & Humer Proc Except Hip,foot,femur W Cc (493)	10	10	\$6,331	\$108,248	\$7,863,171	2.7%
Acute Myocardial Infarction, Discharged Alive W/O Cc/Mcc (282)	9	9	\$1,952	\$36,358	\$7,283,955	7.0%
Respiratory Infections & Inflammations W Mcc (177)	29	29	\$1,507	\$320,283	\$6,750,617	0.5%
All Other Codes	3,362	3,362	\$38,245	\$34,907,869	\$52,292,911	0.0%
Combined	3,872	3,872	\$149,347	\$39,033,769	\$510,977,976	0.4%

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	48,241	73,111	\$165,623	\$59,845,616	\$772,019,259	0.2%

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	8,888	1,105	12.4%
Chiropractic manipulation (98941)	610	213	34.9%
Complete cbc w/auto diff wbc (85025)	743	298	40.1%
Comprehen metabolic panel (80053)	629	134	21.3%
Office/outpatient visit, est (99213)	2,293	215	9.4%
Office/outpatient visit, est (99214)	2,316	404	17.4%
Routine venipuncture (36415)	1,510	325	21.5%
Subsequent hospital care (99232)	1,590	235	14.8%
Subsequent hospital care (99233)	610	316	51.8%
Therapeutic exercises (97110)	752	142	18.9%
Other	19,749	3,404	17.2%
TOS Code			
Hospital visit - subsequent	2,830	646	22.8%
Lab tests - automated general profiles	947	215	22.7%
Lab tests - blood counts	907	348	38.4%
Lab tests - other (non-Medicare fee schedule)	4,556	956	21.0%
Lab tests - routine venipuncture (non Medicare fee schedule)	1,549	325	21.0%
Minor procedures - other (Medicare fee schedule)	2,738	481	17.6%
Office visits - established	5,863	964	16.4%
Specialist - ophthalmology	1,061	47	4.4%
Specialist - other	1,416	14	1.0%
Standard imaging - chest	975	174	17.8%
Other	16,848	2,621	15.6%
Resolution Type			
Automated	8,780	484	5.5%
Complex	17	2	11.8%
None	30,845	6,297	20.4%
Routine	48	8	16.7%
Diagnosis Code			
Arthropathies and related disorders	2,088	392	18.8%

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Diseases of other endocrine glands	2,014	347	17.2%
Disorders of the eye and adnexa	1,914	108	5.6%
Dorsopathies	1,962	351	17.9%
Hypertensive disease	1,925	432	22.4%
Osteopathies, chondropathies, and acquired musculoskeletal deformities	1,392	333	23.9%
Other forms of heart disease	1,828	352	19.3%
Other metabolic disorders and immunity disorders	1,533	316	20.6%
Persons encountering health services for specific procedures and aftercare	1,140	299	26.2%
Symptoms	4,090	667	16.3%
Other	19,804	3,194	16.1%

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	2,742	1,358	49.5%
Blood glucose/reagent strips (A4253)	1,466	1,247	85.1%
Calibrator solution/chips (A4256)	445	373	83.8%
Cont airway pressure device (E0601)	318	163	51.3%
Disp fee inhal drugs/30 days (Q0513)	389	246	63.2%
Hosp bed semi-electr w/ matt (E0260)	232	183	78.9%
Lancets per box (A4259)	858	722	84.1%
Nebulizer with compression (E0570)	458	229	50.0%
Oxygen concentrator (E1390)	1,293	903	69.8%
Portable gaseous O2 (E0431)	658	467	71.0%
Other	4,925	3,219	65.4%
TOS Code			
All Policy Groups with Less than 30 Claims	475	214	45.1%
CPAP	1,504	954	63.4%
Enteral Nutrition	341	201	58.9%
Glucose Monitor	3,148	2,651	84.2%
Immunosuppressive Drugs	384	230	59.9%
Nebulizers & Related Drugs	1,825	1,062	58.2%
Ostomy Supplies	356	159	44.7%
Oxygen Supplies/Equipment	2,386	1,633	68.4%
Wheelchairs Manual	459	376	81.9%
Wheelchairs Options/Accessories	373	284	76.1%
Other	2,533	1,346	53.1%
Resolution Type			
Automated	1,747	20	1.1%
Complex	14	0	0.0%
None	11,921	9,025	75.7%
Routine	102	65	63.7%
Diagnosis Code			
All Codes With Less Than 30 Claims	878	486	55.4%
Arthropathies and related disorders	379	281	74.1%
Chronic obstructive pulmonary disease and allied conditions	3,314	2,082	62.8%
Diseases of other endocrine glands	3,535	2,926	82.8%
Ill-defined and unknown causes of morbidity and mortality	337	232	68.8%
No Matching Diagnosis Code Label	1,592	1,023	64.3%
Other diseases of skin and subcutaneous tissue	185	101	54.6%
Other forms of heart disease	301	202	67.1%
Persons with a condition influencing their health status	984	444	45.1%
Symptoms	734	437	59.5%
Other	1,545	896	58.0%

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	410	91	22.2%
Clinical Rural Health	924	38	4.1%
Critical Access Hospital	1,088	279	25.6%
Home Health	1,199	150	12.5%
Hospital Inpatient (Part A)	269	18	6.7%
Hospital Other Part B	1,150	415	36.1%
Hospital Outpatient	8,248	1,890	22.9%
Nonhospital based hospice	459	14	3.1%
SNF Inpatient	844	109	12.9%
SNF Inpatient Part B	266	44	16.5%
Other	908	92	10.1%
TOS Code			
Clinic ESRD	410	91	22.2%
Clinical Rural Health	924	38	4.1%
Critical Access Hospital	1,088	279	25.6%
Home Health	1,199	150	12.5%
Hospital Inpatient (Part A)	269	18	6.7%
Hospital Other Part B	1,150	415	36.1%
Hospital Outpatient	8,248	1,890	22.9%
Nonhospital based hospice	459	14	3.1%
SNF Inpatient	844	109	12.9%
SNF Inpatient Part B	266	44	16.5%
Other	908	92	10.1%
Diagnosis Code			
Arthropathies and related disorders	600	97	16.2%
Diseases of other endocrine glands	747	161	21.6%
Dorsopathies	486	75	15.4%
Hypertensive disease	762	171	22.4%
Nephritis, nephrotic syndrome, and nephrosis	552	135	24.5%
Other forms of heart disease	805	184	22.9%
Other metabolic disorders and immunity disorders	494	144	29.1%
Persons encountering health services for specific procedures and aftercare	1,501	346	23.1%
Persons without reported diagnosis encountered during examination and investigation of individuals and populations	607	87	14.3%
Symptoms	1,590	367	23.1%
Other	7,621	1,373	18.0%

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			
Chronic Obstructive Pulmonary Disease W Mcc (190)	59	4	6.8%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	76	17	22.4%
Heart Failure & Shock W Cc (292)	83	10	12.0%
Heart Failure & Shock W Mcc (291)	77	14	18.2%
Kidney & Urinary Tract Infections W/O Mcc (690)	67	8	11.9%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	143	36	25.2%
Psychoses (885)	89	10	11.2%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	115	8	7.0%
Simple Pneumonia & Pleurisy W Cc (194)	67	7	10.4%
Syncope & Collapse (312)	61	12	19.7%
Other	3,035	639	21.1%
TOS Code			
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	99	14	14.1%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	131	23	17.6%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	101	22	21.8%
Heart Failure & Shock (291 , 292 , 293)	182	27	14.8%
Kidney & Urinary Tract Infections (689 , 690)	101	17	16.8%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	154	38	24.7%
Nutritional & Misc Metabolic Disorders (640 , 641)	85	17	20.0%
Psychoses (885)	89	10	11.2%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	139	11	7.9%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	146	16	11.0%
Other	2,645	570	21.6%
Diagnosis Code			
Arthropathies and related disorders	153	45	29.4%
Cerebrovascular disease	154	11	7.1%
Chronic obstructive pulmonary disease and allied conditions	146	25	17.1%
Complications of surgical and medical care, not elsewhere classified	158	31	19.6%
Ischemic heart disease	202	46	22.8%
Other bacterial diseases	157	17	10.8%
Other diseases of urinary system	131	26	19.8%
Other forms of heart disease	409	81	19.8%
Pneumonia and influenza	169	17	10.1%
Symptoms	213	68	31.9%
Other	1,980	398	20.1%

Table K5: Included and Excluded in the Sample

Error 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 error 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 error 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	20,494	576	21,070	97.3%
No Resolution	20,494	576	21,070	97.3%
Provider Compliance	20,494	576	21,070	97.3%

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

Error Type	Included	Dropped	Total	Percent Included
Paid	8,110	149	8,259	98.2%
No Resolution	8,120	139	8,259	98.3%
Provider Compliance	8,110	149	8,259	98.2%

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	19,637	2,131	21,768	90.2%
No Resolution	19,642	2,126	21,768	90.2%
Provider Compliance	19,637	2,131	21,768	90.2%