



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

The Supplementary Appendices for the

Medicare

Fee-for-Service

2010 Improper Payment

Report

Appendix Organization

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Appendix A – List of Acronyms

AC	Affiliated Contractor
AMA	American Medical Association
BBA	Balanced Budget Act of 1997
BETOS	Berenson-Eggers Type of Service
CAFM	Contractor Administrative-Budget and Financial Management System
CDAC	Clinical Data Abstraction Center
CERT	Comprehensive Error Rate Testing
CMN	Certificate of Medical Necessity
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
CTRDS	CERT Tracking and Reporting Database and System
CY	Calendar Year
DARN	Dollars at Risk of No Documentation
DHHS	Department of Health and Human Services
DRG	Diagnosis Related Group
DME	Durable Medical Equipment
DMERC	Durable Medical Equipment Regional Carrier
E&M	Evaluation and Management
EMR	Electronic Medical Records
ESRD	End Stage Renal Disease
FFS	Fee-for-Service
FI	Fiscal Intermediary
FY	Fiscal Year
GPRA	Government Performance & Results Act of 1993
HCPCS	Healthcare Common Procedure Coding System
HHA	Home Health Agency
HICN	Health Insurance Claim Number
HIPAA	Health Insurance Portability and Accountability Act of 1996
HI	Hospital Insurance
HPMP	Hospital Payment Monitoring Program
ICD-9-CM	International Classification of Diseases (10 th Revision) Clinical Modification
IPIA	Improper Payment Information Act
LCD	Local Coverage Determination
LI	Line Item
LPET	Local Provider Education and Training
MAC	Medicare Administrative Contractor
MMA	Medicare Modernization Act
MFS	Medicare Fee Schedule
MIP	Medicare Integrity Program

MSP	Medicare Secondary Payer
NCH	National Claims History
OIG	Office of the Inspector General
OPPS	Outpatient Prospective Payment System
PPS	Prospective Payment System
PSC	Program Safeguard Contractor
QIO	Quality Improvement Organization
RAC	Recovery Audit Contractors
RAP	Request for Anticipated Payment
RHC	Rural Health Clinic
RHHI	Regional Home Health Intermediary
RTP	Return to Provider
SNF	Skilled Nursing Facility

Appendix B: Projected Improper Payments and Type of Error by Type of Service for each Claim Type

Tables B1 through B4 displays the paid claims error rates for each type of service by type of error. 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	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
All Other Codes	\$2,596,449,264	9.3%	7.8% - 10.7%	2.0%	76.7%	16.7%	4.0%	0.7%
Office visits – established	\$1,475,533,109	12.3%	11.4% - 13.2%	1.5%	54.4%	0.5%	42.8%	0.8%
Hospital visit – subsequent	\$1,099,101,902	20.5%	17.0% - 23.9%	1.4%	62.8%	0.0%	35.8%	0.0%
Minor procedures - other (Medicare fee schedule)	\$686,424,679	18.1%	14.9% - 21.2%	1.7%	82.8%	12.4%	2.0%	1.1%
Consultations	\$670,743,182	23.3%	20.9% - 25.8%	0.3%	21.6%	0.0%	78.0%	0.1%
Lab tests - other (non-Medicare fee schedule)	\$561,377,980	19.9%	14.7% - 25.1%	1.2%	66.4%	31.8%	0.3%	0.3%
Hospital visit - initial	\$481,856,709	28.2%	24.1% - 32.4%	0.6%	38.3%	0.0%	60.8%	0.2%
Other drugs	\$436,214,485	8.4%	3.4% - 13.5%	0.1%	63.1%	30.9%	5.9%	0.0%
Nursing home visit	\$346,166,960	21.7%	18.0% - 25.3%	3.8%	51.6%	0.4%	44.1%	0.2%
Office visits - new	\$292,486,069	24.0%	20.4% - 27.5%	0.7%	30.5%	2.1%	64.5%	2.3%
Specialist - psychiatry	\$276,156,504	27.7%	19.4% - 36.1%	2.8%	74.8%	21.2%	1.1%	0.1%
Chiropractic	\$256,897,088	43.9%	38.3% - 49.6%	0.0%	39.5%	57.1%	0.7%	2.6%
Chemotherapy	\$251,015,056	19.8%	2.6% - 37.1%	0.0%	95.1%	4.6%	0.3%	0.0%
Oncology - radiation therapy	\$216,614,872	10.6%	3.0% - 18.1%	0.0%	100.0%	0.0%	0.0%	0.0%
Ambulance	\$205,210,656	4.1%	2.4% - 5.7%	7.3%	19.5%	62.2%	11.0%	0.0%
Advanced imaging - CAT/CT/CTA: other	\$196,933,783	16.0%	9.7% - 22.3%	3.9%	72.7%	21.0%	2.5%	0.0%
Echography/ultrasonography - heart	\$185,481,483	16.7%	10.7% - 22.8%	0.0%	52.2%	47.1%	0.7%	0.0%
Lab tests - other (Medicare fee schedule)	\$182,305,995	8.1%	5.3% - 11.0%	0.1%	62.5%	25.5%	11.9%	0.0%
Emergency room visit	\$181,297,441	9.4%	7.3% - 11.5%	1.8%	33.9%	0.0%	63.8%	0.5%
Other tests - other	\$177,613,915	14.7%	10.8% - 18.7%	3.1%	53.6%	39.3%	3.9%	0.0%
Specialist - ophthalmology	\$163,438,427	7.1%	5.1% - 9.2%	0.3%	93.7%	4.7%	1.4%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$10,939,319,559	12.9%	12.1% - 13.8%	1.5%	61.8%	13.2%	22.9%	0.5%

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

Service Type Billed to DME	Projected Improper Payments	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Oxygen Supplies/Equipment	\$1,227,041,101	75.1%	72.8% - 77.3%	0.2%	63.1%	36.3%	0.2%	0.2%
Glucose Monitor	\$1,114,010,346	85.9%	84.0% - 87.8%	0.7%	50.0%	49.1%	0.0%	0.2%
Wheelchairs Motorized	\$822,105,083	92.6%	86.0% - 99.3%	0.0%	63.6%	36.4%	0.0%	0.0%
All Policy Groups with Less than 30 Claims	\$655,689,620	56.9%	44.1% - 69.7%	0.9%	60.2%	37.7%	0.0%	1.3%
Nebulizers & Related Drugs	\$457,143,231	67.6%	59.3% - 75.8%	4.2%	67.5%	27.8%	0.1%	0.3%
CPAP	\$336,863,306	67.6%	62.6% - 72.7%	0.6%	67.8%	31.3%	0.0%	0.3%
All Other Codes	\$305,776,396	63.6%	56.5% - 70.7%	4.0%	66.0%	29.7%	0.4%	0.0%
Immunosuppressive Drugs	\$270,032,267	62.8%	52.1% - 73.5%	1.5%	64.3%	34.2%	0.0%	0.0%
Enteral Nutrition	\$266,995,082	68.5%	60.0% - 77.1%	0.2%	56.3%	43.5%	0.0%	0.0%
Wheelchairs Options/Accessories	\$265,939,233	90.0%	79.4% -100.5%	0.0%	43.4%	56.5%	0.0%	0.1%
Infusion Pumps & Related Drugs	\$265,723,050	80.9%	65.1% - 96.6%	0.0%	75.5%	24.5%	0.0%	0.0%
Wheelchairs Manual	\$211,846,705	90.6%	85.3% - 96.0%	0.3%	61.9%	37.4%	0.4%	0.1%
Lower Limb Orthoses	\$193,528,373	67.2%	49.3% - 85.2%	2.4%	73.5%	23.9%	0.0%	0.2%
Diabetic Shoes	\$193,431,651	77.4%	70.1% - 84.7%	0.9%	66.7%	31.1%	0.0%	1.4%
Hospital Beds/Accessories	\$169,594,758	86.7%	83.1% - 90.3%	1.1%	60.5%	36.1%	1.6%	0.7%
Surgical Dressings	\$146,760,612	76.4%	60.7% - 92.2%	6.8%	69.8%	23.2%	0.3%	0.0%
Ostomy Supplies	\$100,059,705	61.9%	51.0% - 72.7%	0.0%	67.4%	32.3%	0.0%	0.3%
Respiratory Assist Device	\$77,592,020	61.7%	50.3% - 73.2%	0.0%	75.2%	24.8%	0.0%	0.0%
Support Surfaces	\$60,652,179	73.6%	58.5% - 88.6%	0.0%	74.3%	16.5%	3.2%	6.0%
Urological Supplies	\$59,524,108	38.3%	21.0% - 55.6%	0.2%	31.8%	63.6%	0.1%	4.4%
Walkers	\$51,083,922	72.7%	64.4% - 80.9%	0.0%	60.6%	38.6%	0.0%	0.8%
All Type of Services (Incl. Codes Not Listed)	\$7,251,392,747	73.8%	71.5% - 76.1%	1.0%	61.4%	37.1%	0.1%	0.4%

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	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Hospital Outpatient	\$1,530,148,047	5.3%	4.6% - 6.1%	0.3%	80.9%	13.8%	4.7%	0.2%
Home Health	\$995,517,962	4.8%	3.6% - 6.0%	3.1%	27.5%	60.1%	6.5%	2.7%
SNF Inpatient	\$772,666,256	3.3%	1.9% - 4.6%	0.0%	37.4%	23.4%	38.3%	0.9%
Clinic ESRD	\$298,310,567	3.9%	2.3% - 5.5%	0.4%	85.3%	9.7%	4.5%	0.0%
Nonhospital based hospice	\$269,121,243	2.4%	1.0% - 3.7%	0.0%	27.3%	69.1%	0.1%	3.5%
Critical Access Hospital	\$214,648,018	5.3%	3.5% - 7.1%	0.2%	81.2%	14.1%	4.2%	0.3%
Hospital Inpatient	\$183,380,391	2.1%	1.5% - 2.7%	0.0%	89.8%	0.0%	0.0%	10.2%

Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Projected Improper Payments	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
(Part A)								
SNF Inpatient Part B	\$125,708,426	7.6%	4.4% - 10.7%	0.8%	89.9%	3.7%	5.0%	0.6%
Hospital Other Part B	\$117,971,251	27.3%	24.0% - 30.5%	0.4%	71.3%	26.4%	1.8%	0.1%
Hospital based hospice	\$54,215,716	3.8%	(0.2%) - 7.7%	28.6%	29.1%	41.0%	1.3%	0.0%
Hospital Inpatient Part B	\$44,515,938	11.2%	0.4% - 22.0%	0.0%	94.2%	5.3%	0.5%	0.0%
Clinic – Freestanding (Effective April 1, 2010)	\$32,477,464	6.9%	4.5% - 9.3%	2.6%	94.8%	2.6%	0.0%	0.0%
Clinic OPT	\$32,407,925	5.2%	2.5% - 8.0%	22.0%	73.5%	0.3%	3.4%	0.7%
SNF Outpatient	\$24,628,531	13.3%	9.3% - 17.2%	0.0%	78.1%	6.1%	1.0%	14.8%
Clinic CORF	\$20,528,731	10.2%	1.6% - 18.9%	11.3%	87.2%	0.0%	1.5%	0.0%
Hospital Swing Bed	\$13,928,431	1.2%	0.7% - 1.6%	0.0%	0.0%	100.0%	0.0%	0.0%
Clinical Rural Health	\$13,853,420	2.3%	1.5% - 3.1%	8.7%	88.1%	3.2%	0.0%	0.0%
Community Mental Health Centers	\$1,598,668	0.5%	(0.0%) - 1.0%	50.9%	0.0%	49.1%	0.0%	0.0%
All Codes With Less Than 30 Claims	\$0	0.0%	0.0% - 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Home Health (Part B Only)	\$0	0.0%	0.0% - 0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$4,745,626,984	4.2%	3.7% - 4.7%	1.4%	59.6%	27.7%	9.8%	1.5%

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	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
All Other Codes	\$6,883,073,837	9.0%	6.8% - 11.3%	0.3%	8.4%	72.7%	18.6%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	\$1,416,348,286	24.3%	16.2% - 32.5%	0.0%	20.0%	80.0%	0.0%	0.0%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	\$988,741,766	47.2%	41.2% - 53.3%	0.0%	0.0%	81.8%	18.2%	0.0%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	\$385,315,015	17.1%	5.1% - 29.1%	0.0%	6.8%	93.2%	0.0%	0.0%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	\$247,989,539	5.1%	2.5% - 7.8%	0.0%	29.1%	0.0%	70.9%	0.0%
Chest Pain (313)	\$168,421,077	20.9%	9.2% - 32.5%	0.0%	25.4%	71.1%	0.4%	3.1%
G.I. Hemorrhage (377 , 378 , 379)	\$149,527,576	9.9%	6.3% - 13.5%	0.0%	0.0%	79.3%	20.7%	0.0%
Major Small & Large Bowel Procedures (329 , 330 , 331)	\$149,091,352	6.6%	(1.0%) - 14.2%	0.0%	34.2%	11.1%	54.7%	0.0%
Respiratory Infections & Inflammations (177 , 178 , 179)	\$138,235,571	6.4%	5.8% - 7.0%	0.0%	0.0%	59.9%	40.1%	0.0%

Service Type Billed to Part A Inpatient Hospital PPS (MS-DRG Groups)	Projected Improper Payments	Error Rate	95% Confidence Interval	Type of Error				
				No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	\$135,111,217	12.6%	10.5% - 14.6%	0.0%	0.0%	99.9%	0.1%	0.0%
Kidney & Urinary Tract Infections (689 , 690)	\$117,843,881	9.6%	1.0% - 18.3%	0.0%	0.0%	59.4%	40.6%	0.0%
Nutritional & Misc Metabolic Disorders (640 , 641)	\$115,574,973	9.7%	6.5% - 12.8%	0.0%	0.0%	96.0%	4.0%	0.0%
Renal Failure (682 , 683 , 684)	\$86,143,600	4.5%	2.7% - 6.4%	0.0%	0.0%	82.1%	17.9%	0.0%
Syncope & Collapse (312)	\$74,323,384	11.2%	7.9% - 14.5%	0.0%	5.1%	90.2%	4.7%	0.0%
Heart Failure & Shock (291 , 292 , 293)	\$72,755,513	1.6%	0.1% - 3.1%	0.0%	0.0%	9.3%	83.3%	7.4%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	\$64,116,976	4.4%	1.5% - 7.2%	0.0%	20.7%	55.5%	23.8%	0.0%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	\$62,310,615	2.4%	0.6% - 4.2%	0.0%	0.0%	0.0%	100.0%	0.0%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	\$53,990,166	4.9%	(0.8%) - 10.6%	0.0%	0.0%	0.0%	100.0%	0.0%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	\$8,601,782	0.4%	0.4% - 0.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	\$7,780,135	0.4%	0.1% - 0.7%	0.0%	0.0%	0.0%	100.0%	0.0%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	\$7,029,328	0.4%	(0.1%) - 0.9%	0.0%	0.0%	0.0%	100.0%	0.0%
All Type of Services (Incl. Codes Not Listed)	\$11,332,325,591	9.5%	7.8% - 11.2%	0.2%	9.5%	71.8%	18.4%	0.1%

Appendix C: Error Rates and Type of Error by Type of Service for each Claim Type

Table C1: Top 20 Service Type Error Rates: Part B

Service Type Billed to Part B (BETOS codes)	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Chiropractic	43.9%	38.3% - 49.6%	0.0%	39.5%	57.1%	0.7%	2.6%
Hospital visit - initial	28.2%	24.1% - 32.4%	0.6%	38.3%	0.0%	60.8%	0.2%
Specialist - psychiatry	27.7%	19.4% - 36.1%	2.8%	74.8%	21.2%	1.1%	0.1%
Office visits – new	24.0%	20.4% - 27.5%	0.7%	30.5%	2.1%	64.5%	2.3%
Consultations	23.3%	20.9% - 25.8%	0.3%	21.6%	0.0%	78.0%	0.1%
Nursing home visit	21.7%	18.0% - 25.3%	3.8%	51.6%	0.4%	44.1%	0.2%
Hospital visit – subsequent	20.5%	17.0% - 23.9%	1.4%	62.8%	0.0%	35.8%	0.0%
Lab tests - other (non-Medicare fee schedule)	19.9%	14.7% - 25.1%	1.2%	66.4%	31.8%	0.3%	0.3%
Chemotherapy	19.8%	2.6% - 37.1%	0.0%	95.1%	4.6%	0.3%	0.0%
Minor procedures - other (Medicare fee schedule)	18.1%	14.9% - 21.2%	1.7%	82.8%	12.4%	2.0%	1.1%
Echography/ultrasonography – heart	16.7%	10.7% - 22.8%	0.0%	52.2%	47.1%	0.7%	0.0%
Advanced imaging - CAT/CT/CTA: other	16.0%	9.7% - 22.3%	3.9%	72.7%	21.0%	2.5%	0.0%
Other tests – other	14.7%	10.8% - 18.7%	3.1%	53.6%	39.3%	3.9%	0.0%
Office visits – established	12.3%	11.4% - 13.2%	1.5%	54.4%	0.5%	42.8%	0.8%
Oncology - radiation therapy	10.6%	3.0% - 18.1%	0.0%	100.0%	0.0%	0.0%	0.0%
Emergency room visit	9.4%	7.3% - 11.5%	1.8%	33.9%	0.0%	63.8%	0.5%
All Other Codes	9.3%	7.8% - 10.7%	2.0%	76.7%	16.7%	4.0%	0.7%
Other drugs	8.4%	3.4% - 13.5%	0.1%	63.1%	30.9%	5.9%	0.0%
Lab tests - other (Medicare fee schedule)	8.1%	5.3% - 11.0%	0.1%	62.5%	25.5%	11.9%	0.0%
Specialist - ophthalmology	7.1%	5.1% - 9.2%	0.3%	93.7%	4.7%	1.4%	0.0%
Ambulance	4.1%	2.4% - 5.7%	7.3%	19.5%	62.2%	11.0%	0.0%
All Types of Services	12.9%	12.1% - 13.8%	1.5%	61.8%	13.2%	22.9%	0.5%

Table C2: Top 20 Service Type Error Rates: DME

Service Type Billed to DMEs	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Wheelchairs Motorized	92.6%	86.0% - 99.3%	0.0%	63.6%	36.4%	0.0%	0.0%
Wheelchairs Manual	90.6%	85.3% - 96.0%	0.3%	61.9%	37.4%	0.4%	0.1%
Wheelchairs Options/Accessories	90.0%	79.4% - 100.5%	0.0%	43.4%	56.5%	0.0%	0.1%
Hospital Beds/Accessories	86.7%	83.1% - 90.3%	1.1%	60.5%	36.1%	1.6%	0.7%

Service Type Billed to DMEs	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Glucose Monitor	85.9%	84.0% - 87.8%	0.7%	50.0%	49.1%	0.0%	0.2%
Infusion Pumps & Related Drugs	80.9%	65.1% - 96.6%	0.0%	75.5%	24.5%	0.0%	0.0%
Diabetic Shoes	77.4%	70.1% - 84.7%	0.9%	66.7%	31.1%	0.0%	1.4%
Surgical Dressings	76.4%	60.7% - 92.2%	6.8%	69.8%	23.2%	0.3%	0.0%
Oxygen Supplies/Equipment	75.1%	72.8% - 77.3%	0.2%	63.1%	36.3%	0.2%	0.2%
Support Surfaces	73.6%	58.5% - 88.6%	0.0%	74.3%	16.5%	3.2%	6.0%
Walkers	72.7%	64.4% - 80.9%	0.0%	60.6%	38.6%	0.0%	0.8%
Enteral Nutrition	68.5%	60.0% - 77.1%	0.2%	56.3%	43.5%	0.0%	0.0%
CPAP	67.6%	62.6% - 72.7%	0.6%	67.8%	31.3%	0.0%	0.3%
Nebulizers & Related Drugs	67.6%	59.3% - 75.8%	4.2%	67.5%	27.8%	0.1%	0.3%
Lower Limb Orthoses	67.2%	49.3% - 85.2%	2.4%	73.5%	23.9%	0.0%	0.2%
All Other Codes	63.6%	56.5% - 70.7%	4.0%	66.0%	29.7%	0.4%	0.0%
Immunosuppressive Drugs	62.8%	52.1% - 73.5%	1.5%	64.3%	34.2%	0.0%	0.0%
Ostomy Supplies	61.9%	51.0% - 72.7%	0.0%	67.4%	32.3%	0.0%	0.3%
Respiratory Assist Device	61.7%	50.3% - 73.2%	0.0%	75.2%	24.8%	0.0%	0.0%
All Policy Groups with Less than 30 Claims	56.9%	44.1% - 69.7%	0.9%	60.2%	37.7%	0.0%	1.3%
Urological Supplies	38.3%	21.0% - 55.6%	0.2%	31.8%	63.6%	0.1%	4.4%
All Types of Services	73.8%	71.5% - 76.1%	1.0%	61.4%	37.1%	0.1%	0.4%

Table C3: Top 20 Service Type Error Rates: Part A excluding Inpatient Hospital PPS

Service Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Hospital Other Part B	27.3%	24.0% - 30.5%	0.4%	71.3%	26.4%	1.8%	0.1%
SNF Outpatient	13.3%	9.3% - 17.2%	0.0%	78.1%	6.1%	1.0%	14.8%
Hospital Inpatient Part B	11.2%	0.4% - 22.0%	0.0%	94.2%	5.3%	0.5%	0.0%
Clinic CORF	10.2%	1.6% - 18.9%	11.3%	87.2%	0.0%	1.5%	0.0%
SNF Inpatient Part B	7.6%	4.4% - 10.7%	0.8%	89.9%	3.7%	5.0%	0.6%
Clinic – Freestanding (Effective April 1, 2010)	6.9%	4.5% - 9.3%	2.6%	94.8%	2.6%	0.0%	0.0%
Hospital Outpatient	5.3%	4.6% - 6.1%	0.3%	80.9%	13.8%	4.7%	0.2%
Critical Access Hospital	5.3%	3.5% - 7.1%	0.2%	81.2%	14.1%	4.2%	0.3%
Clinic OPT	5.2%	2.5% - 8.0%	22.0%	73.5%	0.3%	3.4%	0.7%
Home Health	4.8%	3.6% - 6.0%	3.1%	27.5%	60.1%	6.5%	2.7%
Clinic ESRD	3.9%	2.3% - 5.5%	0.4%	85.3%	9.7%	4.5%	0.0%
Hospital based hospice	3.8%	(0.2%) - 7.7%	28.6%	29.1%	41.0%	1.3%	0.0%
SNF Inpatient	3.3%	1.9% - 4.6%	0.0%	37.4%	23.4%	38.3%	0.9%
Nonhospital based hospice	2.4%	1.0% - 3.7%	0.0%	27.3%	69.1%	0.1%	3.5%
Clinical Rural Health	2.3%	1.5% - 3.1%	8.7%	88.1%	3.2%	0.0%	0.0%
Hospital Inpatient (Part A)	2.1%	1.5% - 2.7%	0.0%	89.8%	0.0%	0.0%	10.2%

Service Service Type Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Hospital Swing Bed	1.2%	0.7% - 1.6%	0.0%	0.0%	100.0%	0.0%	0.0%
Community Mental Health Centers	0.5%	(0.0%) - 1.0%	50.9%	0.0%	49.1%	0.0%	0.0%
All Codes With Less Than 30 Claims	0.0%	0.0% - 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	4.2%	3.7% - 4.7%	1.4%	59.6%	27.7%	9.8%	1.5%

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

Service Types for Which Part A Inpatient Hospital PPS are Responsible (MS-DRG Groups)	Paid Claims Error Rate	95% Confidence Interval	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	47.2%	41.2% - 53.3%	0.0%	0.0%	81.8%	18.2%	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	24.3%	16.2% - 32.5%	0.0%	20.0%	80.0%	0.0%	0.0%
Chest Pain (313)	20.9%	9.2% - 32.5%	0.0%	25.4%	71.1%	0.4%	3.1%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	17.1%	5.1% - 29.1%	0.0%	6.8%	93.2%	0.0%	0.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	12.6%	10.5% - 14.6%	0.0%	0.0%	99.9%	0.1%	0.0%
Syncope & Collapse (312)	11.2%	7.9% - 14.5%	0.0%	5.1%	90.2%	4.7%	0.0%
G.I. Hemorrhage (377 , 378 , 379)	9.9%	6.3% - 13.5%	0.0%	0.0%	79.3%	20.7%	0.0%
Nutritional & Misc Metabolic Disorders (640 , 641)	9.7%	6.5% - 12.8%	0.0%	0.0%	96.0%	4.0%	0.0%
Kidney & Urinary Tract Infections (689 , 690)	9.6%	1.0% - 18.3%	0.0%	0.0%	59.4%	40.6%	0.0%
All Other Codes	9.0%	6.8% - 11.3%	0.3%	8.4%	72.7%	18.6%	0.0%
Major Small & Large Bowel Procedures (329 , 330 , 331)	6.6%	(1.0%) - 14.2%	0.0%	34.2%	11.1%	54.7%	0.0%
Respiratory Infections & Inflammations (177 , 178 , 179)	6.4%	5.8% - 7.0%	0.0%	0.0%	59.9%	40.1%	0.0%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	5.1%	2.5% - 7.8%	0.0%	29.1%	0.0%	70.9%	0.0%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	4.9%	(0.8%) - 10.6%	0.0%	0.0%	0.0%	100.0%	0.0%
Renal Failure (682 , 683 , 684)	4.5%	2.7% - 6.4%	0.0%	0.0%	82.1%	17.9%	0.0%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	4.4%	1.5% - 7.2%	0.0%	20.7%	55.5%	23.8%	0.0%
Simple Pneumonia & Pleurisy (193 , 194 ,	2.4%	0.6% - 4.2%	0.0%	0.0%	0.0%	100.0%	0.0%

195)							
Heart Failure & Shock (291 , 292 , 293)	1.6%	0.1% - 3.1%	0.0%	0.0%	9.3%	83.3%	7.4%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	0.4%	0.4% - 0.5%	0.0%	100.0%	0.0%	0.0%	0.0%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	0.4%	(0.1%) - 0.9%	0.0%	0.0%	0.0%	100.0%	0.0%
Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	0.4%	0.1% - 0.7%	0.0%	0.0%	0.0%	100.0%	0.0%
All Types of Services	9.5%	7.8% - 11.2%	0.2%	9.5%	71.8%	18.4%	0.1%

Appendix D: Projected Improper Payment Amounts by Error Type

1. No Documentation Errors

Table D1 is a combined list of the services with the highest projected improper payments due to no documentation errors for all contractor types. All appendix D tables are sorted in descending order by projected improper payments.

Table D1: Top 20 Services with No Documentation Errors: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	No Documentation Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Home Health	0.1%	\$31,349,590	(0.0%) - 0.3%
Minor procedures – musculoskeletal	3.1%	\$27,729,707	2.6% - 3.6%
Office visits – established	0.2%	\$21,951,059	0.1% - 0.3%
Nebulizers & Related Drugs	2.9%	\$19,373,311	(1.8%) - 7.6%
Hospital based hospice	1.1%	\$15,486,796	(1.0%) - 3.2%
Hospital visit – subsequent	0.3%	\$15,158,949	0.1% - 0.5%
Ambulance	0.3%	\$15,037,966	(0.2%) - 0.8%
Nursing home visit	0.8%	\$13,005,308	0.1% - 1.5%
Minor procedures - other (Medicare fee schedule)	0.3%	\$11,922,024	(0.0%) - 0.6%
Surgical Dressings	5.2%	\$9,974,792	(2.5%) - 12.9%
Advanced imaging - CAT/CT/CTA: other	0.6%	\$7,747,739	(0.6%) - 1.9%
Specialist – psychiatry	0.8%	\$7,731,376	(0.1%) - 1.6%
Glucose Monitor	0.6%	\$7,396,327	0.1% - 1.1%
Clinic OPT	1.2%	\$7,142,133	(0.4%) - 2.7%
Lab tests - other (non-Medicare fee schedule)	0.2%	\$6,616,621	0.0% - 0.4%
Upper Limb Orthoses	9.6%	\$6,219,708	(0.7%) - 19.9%
All Policy Groups with Less than 30 Claims	0.5%	\$5,893,875	(0.2%) - 1.3%
Other tests – other	0.5%	\$5,556,622	(0.2%) - 1.1%
Hospital Outpatient	0.0%	\$4,896,950	0.0% - 0.0%
Lower Limb Orthoses	1.6%	\$4,552,550	(1.4%) - 4.6%
All Other Codes	0.0%	\$79,959,936	0.0% - 0.1%
Overall	0.1%	\$324,703,340	0.1% - 0.1%

2. Insufficient Documentation Errors

Table D2 is a combined list of the services with the highest insufficient documentation paid claims error rates for Part B/DME/Part A including Inpatient Hospital PPS.

Table D2: Top 20 Services with Insufficient Documentation: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Insufficient Documentation Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Hospital Outpatient	4.3%	\$1,237,449,740	3.6% - 5.0%
Office visits - established	6.7%	\$802,662,980	5.9% - 7.5%
Oxygen Supplies/Equipment	47.4%	\$774,472,526	44.8% - 49.9%
Hospital visit - subsequent	12.8%	\$689,969,120	9.6% - 16.1%
Minor procedures - other (Medicare fee schedule)	14.9%	\$568,122,336	12.1% - 17.7%
Glucose Monitor	43.0%	\$557,039,345	40.2% - 45.7%
Wheelchairs Motorized	58.9%	\$522,590,763	43.5% - 74.2%
All Policy Groups with Less than 30 Claims	34.2%	\$394,411,152	22.1% - 46.4%
Lab tests - other (non-Medicare fee schedule)	13.2%	\$372,686,693	7.9% - 18.5%
Nebulizers & Related Drugs	45.6%	\$308,782,534	33.5% - 57.8%
SNF Inpatient	1.2%	\$289,242,076	0.3% - 2.1%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	4.9%	\$283,793,493	0.2% - 9.6%
Other drugs	5.3%	\$275,087,046	1.2% - 9.4%
Home Health	1.3%	\$273,768,518	0.6% - 2.1%
Clinic ESRD	3.3%	\$254,560,897	1.8% - 4.9%
Chemotherapy	18.9%	\$238,687,957	1.5% - 36.2%
CPAP	45.9%	\$228,484,425	40.7% - 51.0%
Oncology - radiation therapy	10.6%	\$216,614,872	3.0% - 18.1%
Specialist - psychiatry	20.7%	\$206,432,788	12.6% - 28.9%
Infusion Pumps & Related Drugs	61.1%	\$200,705,828	35.5% - 86.7%
All Other Codes	3.2%	\$6,428,379,823	2.8% - 3.7%
Overall	4.6%	\$15,123,944,912	4.2% - 5.1%

3. Medically Unnecessary Errors

Table D3 lists the top twenty medically unnecessary services for Part B/DME/Part A including Inpatient Hospital PPS.

Table D3: Top 20 Medically Unnecessary Services: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Medically Unnecessary Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	19.5%	\$1,132,554,793	12.0% - 26.9%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	38.7%	\$809,008,011	32.9% - 44.4%
Home Health	2.9%	\$598,199,047	2.0% - 3.7%
Glucose Monitor	42.2%	\$547,427,190	39.6% - 44.8%
Oxygen Supplies/Equipment	27.3%	\$445,935,166	25.2% - 29.4%
Perc Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	15.9%	\$358,972,968	4.0% - 27.9%
Wheelchairs Motorized	33.7%	\$299,514,320	19.1% - 48.4%
All Policy Groups with Less than 30 Claims	21.4%	\$247,034,480	8.6% - 34.2%
Hospital Outpatient	0.7%	\$211,648,949	0.6% - 0.9%
Nonhospital based hospice	1.6%	\$186,079,275	0.4% - 2.8%
SNF Inpatient	0.8%	\$180,573,195	(0.1%) - 1.6%
Lab tests - other (non-Medicare fee schedule)	6.3%	\$178,788,211	4.6% - 8.1%
Wheelchairs Options/Accessories	50.8%	\$150,205,153	32.5% - 69.1%
Chiropractic	25.1%	\$146,721,768	19.9% - 30.3%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	12.6%	\$135,017,898	10.5% - 14.6%
Other drugs	2.6%	\$134,716,800	(0.5%) - 5.7%
Ambulance	2.5%	\$127,617,676	1.2% - 3.9%
Nebulizers & Related Drugs	18.8%	\$127,269,752	13.7% - 24.0%
Chest Pain (313)	14.8%	\$119,757,122	6.3% - 23.4%
G.I. Hemorrhage (377 , 378 , 379)	7.9%	\$118,528,322	4.7% - 11.0%
All Other Codes	3.5%	\$7,327,639,138	2.7% - 4.3%
Overall	4.2%	\$13,583,209,234	3.5% - 4.8%

4. Incorrect Coding Errors

Table D4 lists the services with the highest paid claims error rates due to incorrect coding for Part B/DME/Part A including Inpatient Hospital PPS.

Table D4: Top 20 Services with Incorrect Coding Errors: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Incorrect Coding Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Office visits - established	5.3%	\$631,530,199	4.8% - 5.8%
Consultations	18.2%	\$523,067,988	16.0% - 20.3%
Hospital visit - subsequent	7.3%	\$393,973,832	5.8% - 8.8%
SNF Inpatient	1.3%	\$296,007,600	0.6% - 1.9%
Hospital visit - initial	17.2%	\$293,112,708	14.3% - 20.1%
Office visits - new	15.4%	\$188,549,224	12.5% - 18.4%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	8.6%	\$179,733,755	7.3% - 9.9%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	3.6%	\$175,721,158	1.1% - 6.2%
Nursing home visit	9.6%	\$152,598,491	7.4% - 11.7%
Emergency room visit	6.0%	\$115,648,482	4.6% - 7.4%
Major Small & Large Bowel Procedures (329 , 330 , 331)	3.6%	\$81,512,478	(3.0%) - 10.2%
Hospital Outpatient	0.3%	\$72,560,544	0.1% - 0.4%
Home Health	0.3%	\$64,917,401	0.1% - 0.5%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	2.4%	\$62,310,615	0.6% - 4.2%
Heart Failure & Shock (291 , 292 , 293)	1.3%	\$60,569,163	(0.2%) - 2.9%
Respiratory Infections & Inflammations (177 , 178 , 179)	2.6%	\$55,366,628	2.3% - 2.9%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	4.9%	\$53,990,166	(0.8%) - 10.6%
Kidney & Urinary Tract Infections (689 , 690)	3.9%	\$47,889,304	1.7% - 6.1%
G.I. Hemorrhage (377 , 378 , 379)	2.1%	\$30,999,254	1.4% - 2.7%
Hospital visit - critical care	3.5%	\$29,838,812	(0.4%) - 7.4%
All Other Codes	0.8%	\$1,560,455,744	0.5% - 1.0%
Overall	1.6%	\$5,070,353,544	1.3% - 1.8%

Table D5 includes incorrect coding errors that resulted in an under payment for Part B, DMEs and overall Part A (including Inpatient Hospital PPS) claim types.

Table D5: Top 20 Services with Underpayment Coding Errors: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Underpayment Coding Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Office visits - established	0.9%	\$105,399,673	0.7% - 1.0%
Heart Failure & Shock (291 , 292 , 293)	1.0%	\$43,594,715	(0.5%) - 2.4%
Hospital Outpatient	0.1%	\$32,069,906	0.0% - 0.2%
Home Health	0.1%	\$31,174,925	0.0% - 0.3%
Hospital visit - subsequent	0.5%	\$28,792,653	0.2% - 0.9%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	0.9%	\$23,712,812	(0.8%) - 2.6%
Other drugs	0.4%	\$21,351,537	(0.2%) - 1.1%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	0.4%	\$18,983,386	0.1% - 0.7%
SNF Inpatient	0.1%	\$18,306,117	0.0% - 0.1%
Emergency room visit	0.9%	\$16,740,499	0.4% - 1.4%
Consultations	0.5%	\$13,834,443	0.2% - 0.8%
Kidney & Urinary Tract Infections (689 , 690)	1.1%	\$12,930,822	(1.0%) - 3.1%
Nursing home visit	0.7%	\$11,584,225	0.2% - 1.2%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	0.7%	\$10,461,393	(0.7%) - 2.1%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	0.9%	\$10,026,118	0.5% - 1.3%
Renal Failure (682 , 683 , 684)	0.4%	\$6,956,540	0.0% - 0.7%
Hospital visit - initial	0.3%	\$5,660,148	(0.1%) - 0.8%
Critical Access Hospital	0.1%	\$4,220,364	(0.0%) - 0.2%
G.I. Hemorrhage (377 , 378 , 379)	0.3%	\$4,171,163	0.2% - 0.4%
Anesthesia	0.2%	\$3,125,456	(0.1%) - 0.4%
All Other Codes	0.3%	\$609,393,928	0.1% - 0.5%
Overall	0.3%	\$1,032,490,823	0.2% - 0.4%

Table D6 lists the services with other errors and the associated paid claims error rate.

Table D6: Top 20 Other Errors: All Contractors

Part B (HCPCS), DMEs (HCPCS), Part A excluding Inpatient Hospital PPS (Type of Bill), and Inpatient Hospital PPS (MS-DRG)	Other Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Home Health	0.1%	\$27,283,406	(0.1%) - 0.4%
Hospital Inpatient (Part A)	0.2%	\$18,694,891	(0.2%) - 0.6%
Office visits - established	0.1%	\$12,323,804	(0.0%) - 0.2%
Anesthesia	0.5%	\$10,097,332	0.5% - 0.6%
Nonhospital based hospice	0.1%	\$9,445,096	(0.0%) - 0.2%
All Policy Groups with Less than 30 Claims	0.7%	\$8,350,113	(0.4%) - 1.8%
Minor procedures - other (Medicare fee schedule)	0.2%	\$7,571,516	(0.0%) - 0.4%
Office visits - new	0.6%	\$6,854,122	(0.1%) - 1.2%
SNF Inpatient	0.0%	\$6,843,386	(0.0%) - 0.1%
Chiropractic	1.2%	\$6,795,742	(1.0%) - 3.3%
Heart Failure & Shock (291 , 292 , 293)	0.1%	\$5,409,851	(0.1%) - 0.4%
Chest Pain (313)	0.6%	\$5,153,579	(0.6%) - 1.9%
Support Surfaces	4.4%	\$3,663,597	(4.0%) - 12.9%
SNF Outpatient	2.0%	\$3,637,012	1.4% - 2.6%
Hospital Outpatient	0.0%	\$3,591,864	(0.0%) - 0.0%
Diabetic Shoes	1.0%	\$2,615,910	(0.4%) - 2.5%
Urological Supplies	1.7%	\$2,602,072	(1.6%) - 4.9%
Oxygen Supplies/Equipment	0.1%	\$2,162,195	(0.1%) - 0.3%
Glucose Monitor	0.1%	\$1,939,290	(0.0%) - 0.3%
Ambulatory procedures - skin	0.1%	\$1,751,604	(0.1%) - 0.3%
All Other Codes	0.0%	\$19,667,470	0.0% - 0.0%
Overall	0.1%	\$166,453,851	0.0% - 0.1%

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

Appendix E displays the paid claims error rate (and projected improper payment amount) by service category for each claim type: part B, DME, Part A (excluding inpatient hospital PPS) and Part A (Inpatient hospital PPS). Each table is sorted by projected improper payments from highest to lowest. All estimates are based on a minimum of 30 claims in the sample.

Table E1: Paid Claims Error Rates by Service Type: Part B

Service Types Billed to Part B (BETOS)	Paid Claims Error Rate				
	Error Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Office visits - established	12.3%	8,300	\$1,475,533,109	0.5%	11.4% - 13.2%
Hospital visit - subsequent	20.5%	1,736	\$1,099,101,902	1.8%	17.0% - 23.9%
Minor procedures - other (Medicare fee schedule)	18.1%	2,047	\$686,424,679	1.6%	14.9% - 21.2%
Consultations	23.3%	935	\$670,743,182	1.3%	20.9% - 25.8%
Lab tests - other (non-Medicare fee schedule)	19.9%	3,660	\$561,377,980	2.6%	14.7% - 25.1%
Hospital visit - initial	28.2%	480	\$481,856,709	2.1%	24.1% - 32.4%
Other drugs	8.4%	928	\$436,214,485	2.6%	3.4% - 13.5%
Nursing home visit	21.7%	822	\$346,166,960	1.8%	18.0% - 25.3%
Office visits - new	24.0%	650	\$292,486,069	1.8%	20.4% - 27.5%
Specialist - psychiatry	27.7%	635	\$276,156,504	4.3%	19.4% - 36.1%
Chiropractic	43.9%	743	\$256,897,088	2.9%	38.3% - 49.6%
Chemotherapy	19.8%	83	\$251,015,056	8.8%	2.6% - 37.1%
All Codes With Less Than 30 Claims	8.3%	284	\$237,032,598	4.6%	(0.7%) - 17.4%
Oncology - radiation therapy	10.6%	137	\$216,614,872	3.9%	3.0% - 18.1%
Ambulance	4.1%	583	\$205,210,656	0.9%	2.4% - 5.7%
Advanced imaging - CAT/CT/CTA: other	16.0%	411	\$196,933,783	3.2%	9.7% - 22.3%
Echography/ultrasonography - heart	16.7%	331	\$185,481,483	3.1%	10.7% - 22.8%
Lab tests - other (Medicare fee schedule)	8.1%	647	\$182,305,995	1.5%	5.3% - 11.0%
Emergency room visit	9.4%	751	\$181,297,441	1.1%	7.3% - 11.5%
Other tests - other	14.7%	573	\$177,613,915	2.0%	10.8% - 18.7%
Specialist - ophthalmology	7.1%	1,003	\$163,438,427	1.0%	5.1% - 9.2%
Hospital visit - critical care	19.4%	136	\$163,423,090	3.7%	12.1% - 26.6%
Minor procedures - musculoskeletal	16.0%	444	\$142,157,680	2.4%	11.2% - 20.7%
Standard imaging - nuclear medicine	10.7%	239	\$130,865,845	1.7%	7.4% - 14.0%
Major procedure - Other	11.6%	111	\$118,997,875	1.8%	8.0% - 15.1%
Standard imaging - musculoskeletal	19.1%	989	\$101,277,400	2.3%	14.6% - 23.6%
Advanced imaging - MRI/MRA: other	7.9%	190	\$94,994,807	3.3%	1.6% - 14.3%
Advanced imaging - CAT/CT/CTA: brain/head/neck	22.8%	244	\$90,391,243	7.1%	8.9% - 36.7%
Minor procedures - skin	7.4%	681	\$78,908,580	1.5%	4.5% - 10.3%
Oncology - other	20.4%	142	\$77,198,858	4.0%	12.5% - 28.2%

Service Types Billed to Part B (BETOS)	Paid Claims Error Rate				
	Error Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Standard imaging - chest	15.4%	1,439	\$71,300,501	1.6%	12.2% - 18.6%
Lab tests - blood counts	21.3%	1,353	\$70,127,196	1.4%	18.6% - 24.0%
Dialysis services (Medicare Fee Schedule)	8.5%	171	\$69,844,209	1.9%	4.7% - 12.2%
Other tests - electrocardiograms	18.4%	1,145	\$69,386,568	1.7%	15.1% - 21.7%
Anesthesia	3.7%	538	\$68,394,174	0.9%	1.8% - 5.5%
Specialist - other	29.8%	1,754	\$67,031,682	6.3%	17.4% - 42.1%
Endoscopy - upper gastrointestinal	15.5%	111	\$66,403,143	4.9%	5.9% - 25.0%
Lab tests - automated general profiles	16.9%	1,423	\$63,394,256	1.4%	14.3% - 19.6%
Major procedure, cardiovascular-Other	6.9%	111	\$62,155,214	2.0%	3.1% - 10.8%
Endoscopy - colonoscopy	6.3%	161	\$61,452,625	1.5%	3.5% - 9.2%
Ambulatory procedures - skin	3.0%	554	\$54,869,154	0.7%	1.6% - 4.5%
Imaging/procedure - other	20.2%	209	\$54,355,313	6.6%	7.3% - 33.1%
Echography/ultrasonography - other	9.9%	294	\$48,908,474	2.7%	4.6% - 15.1%
Other tests - EKG monitoring	21.3%	122	\$47,153,470	3.8%	13.8% - 28.8%
Ambulatory procedures - other	7.3%	355	\$47,124,975	1.7%	3.9% - 10.6%
Echography/ultrasonography - carotid arteries	15.0%	124	\$45,488,929	4.6%	6.0% - 23.9%
Echography/ultrasonography - abdomen/pelvis	12.4%	193	\$41,584,679	3.0%	6.5% - 18.3%
Standard imaging - other	13.8%	259	\$40,427,458	3.8%	6.4% - 21.3%
Lab tests - routine venipuncture (non Medicare fee schedule)	19.0%	2,489	\$31,621,876	1.1%	16.9% - 21.1%
Eye procedure - cataract removal/lens insertion	2.0%	137	\$30,551,202	1.2%	(0.4%) - 4.3%
Home visit	9.6%	81	\$27,880,028	2.1%	5.5% - 13.8%
Standard imaging - contrast gastrointestinal	20.2%	79	\$27,767,334	10.0%	0.6% - 39.7%
Other - Medicare fee schedule	15.0%	175	\$25,401,820	5.0%	5.1% - 24.8%
Eye procedure - other	2.7%	150	\$22,090,941	0.8%	1.1% - 4.2%
Advanced imaging - MRI/MRA: brain/head/neck	5.6%	78	\$20,050,652	1.2%	3.3% - 7.9%
Imaging/procedure - heart including cardiac catheter	16.1%	45	\$19,561,167	6.1%	4.2% - 27.9%
Prosthetic/Orthotic devices	11.7%	75	\$16,428,145	8.3%	(4.6%) - 28.0%
Other - non-Medicare fee schedule	27.8%	255	\$16,045,377	4.9%	18.1% - 37.5%
Standard imaging - breast	4.9%	232	\$15,470,193	3.1%	(1.3%) - 11.0%
Other tests - cardiovascular stress tests	6.0%	116	\$12,495,219	1.2%	3.6% - 8.5%
Lab tests - urinalysis	15.8%	762	\$10,111,859	1.7%	12.6% - 19.1%
Lab tests - bacterial cultures	7.8%	225	\$6,970,217	1.6%	4.6% - 11.0%
Ambulatory procedures - musculoskeletal	2.9%	34	\$6,622,653	0.3%	2.4% - 3.5%
Echography/ultrasonography - eye	5.7%	89	\$5,998,555	1.3%	3.0% - 8.3%
Endoscopy - cystoscopy	2.1%	70	\$5,315,202	1.5%	(0.8%) - 5.0%
Immunizations/Vaccinations	1.3%	504	\$4,599,723	0.4%	0.6% - 2.0%
Lab tests - glucose	9.9%	219	\$2,607,145	2.6%	4.8% - 15.0%
Endoscopy - other	2.4%	33	\$2,527,572	0.5%	1.4% - 3.4%
Major procedure, orthopedic - other	0.2%	37	\$1,682,387	0.0%	0.1% - 0.2%
Undefined codes	N/A	707	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	12.9%	30,965	\$10,939,319,559	0.4%	12.1% - 13.8%

Table E2: Paid Claims Error Rates by Service Type: DME

Service Types Billed to DMEs	Paid Claims Error Rate				
	Error Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Oxygen Supplies/Equipment	75.1%	2,501	\$1,227,041,101	1.1%	72.8% - 77.3%
Glucose Monitor	85.9%	2,743	\$1,114,010,346	1.0%	84.0% - 87.8%
Wheelchairs Motorized	92.6%	51	\$822,105,083	3.4%	86.0% - 99.3%
All Policy Groups with Less than 30 Claims	56.9%	310	\$655,689,620	6.5%	44.1% - 69.7%
Nebulizers & Related Drugs	67.6%	1,648	\$457,143,231	4.2%	59.3% - 75.8%
CPAP	67.6%	968	\$336,863,306	2.6%	62.6% - 72.7%
Immunosuppressive Drugs	62.8%	193	\$270,032,267	5.4%	52.1% - 73.5%
Enteral Nutrition	68.5%	266	\$266,995,082	4.4%	60.0% - 77.1%
Wheelchairs Options/Accessories	90.0%	348	\$265,939,233	5.4%	79.4% -100.5%
Infusion Pumps & Related Drugs	80.9%	136	\$265,723,050	8.0%	65.1% - 96.6%
Wheelchairs Manual	90.6%	745	\$211,846,705	2.7%	85.3% - 96.0%
Lower Limb Orthoses	67.2%	152	\$193,528,373	9.2%	49.3% - 85.2%
Diabetic Shoes	77.4%	192	\$193,431,651	3.7%	70.1% - 84.7%
Hospital Beds/Accessories	86.7%	448	\$169,594,758	1.8%	83.1% - 90.3%
Surgical Dressings	76.4%	167	\$146,760,612	8.1%	60.7% - 92.2%
Ostomy Supplies	61.9%	235	\$100,059,705	5.5%	51.0% - 72.7%
Respiratory Assist Device	61.7%	120	\$77,592,020	5.8%	50.3% - 73.2%
Support Surfaces	73.6%	104	\$60,652,179	7.7%	58.5% - 88.6%
Urological Supplies	38.3%	212	\$59,524,108	8.8%	21.0% - 55.6%
Walkers	72.7%	195	\$51,083,922	4.2%	64.4% - 80.9%
TENS	95.1%	101	\$48,690,783	2.6%	90.1% -100.1%
LSO	51.7%	30	\$42,569,869	13.9%	24.4% - 78.9%
Commodos/Bed Pans/Urinals	91.1%	109	\$40,537,713	3.8%	83.6% - 98.6%
Upper Limb Orthoses	53.6%	88	\$34,805,873	10.1%	33.8% - 73.5%
Wheelchairs Seating	84.7%	61	\$34,728,521	7.1%	70.9% - 98.5%
Lenses	32.9%	148	\$20,906,367	5.5%	22.2% - 43.7%
Patient Lift	88.9%	43	\$18,761,064	4.5%	80.1% - 97.7%
Orthopedic Footwear	100.0%	46	\$15,260,104	0.0%	100.0% -100.0%
Breast Prostheses	31.8%	37	\$14,575,736	9.3%	13.7% - 50.0%
Suction Pump	70.3%	54	\$10,319,605	10.0%	50.7% - 89.9%
Repairs/DME	92.5%	51	\$10,249,880	3.4%	85.9% - 99.2%
Tracheostomy Supplies	52.8%	30	\$9,617,209	11.4%	30.4% - 75.2%
Canes/Crutches	63.5%	55	\$4,753,671	8.3%	47.3% - 79.7%
Dialysis Supplies & Equipment	N/A	46	N/A	N/A	N/A
Routinely Denied Items	N/A	108	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	73.8%	11,996	\$7,251,392,747	1.2%	71.5% - 76.1%

Table E3: Paid Claims Error Rates by Service Type: Part A excluding Inpatient Hospital PPS

Service Types Billed to Part A excluding Inpatient Hospital PPS (Type of Bill)	Paid Claims Error Rate				
	Error Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
Hospital Outpatient	5.3%	19,931	\$1,530,148,047	0.4%	4.6% - 6.1%
Home Health	4.8%	1,656	\$995,517,962	0.6%	3.6% - 6.0%
SNF Inpatient	3.3%	1,055	\$772,666,256	0.7%	1.9% - 4.6%
Clinic ESRD	3.9%	715	\$298,310,567	0.8%	2.3% - 5.5%
Nonhospital based hospice	2.4%	788	\$269,121,243	0.7%	1.0% - 3.7%
Critical Access Hospital	5.3%	2,756	\$214,648,018	0.9%	3.5% - 7.1%
Hospital Inpatient (Part A)	2.1%	306	\$183,380,391	0.3%	1.5% - 2.7%
SNF Inpatient Part B	7.6%	521	\$125,708,426	1.6%	4.4% - 10.7%
Hospital Other Part B	27.3%	3,260	\$117,971,251	1.6%	24.0% - 30.5%
Hospital based hospice	3.8%	111	\$54,215,716	2.0%	(0.2%) - 7.7%
Hospital Inpatient Part B	11.2%	115	\$44,515,938	5.5%	0.4% - 22.0%
Clinic – Freestanding (Effective April 1, 2010)	6.9%	636	\$32,477,464	1.2%	4.5% - 9.3%
Clinic OPT	5.2%	453	\$32,407,925	1.4%	2.5% - 8.0%
SNF Outpatient	13.3%	101	\$24,628,531	2.0%	9.3% - 17.2%
Clinic CORF	10.2%	115	\$20,528,731	4.4%	1.6% - 18.9%
Hospital Swing Bed	1.2%	51	\$13,928,431	0.2%	0.7% - 1.6%
Clinical Rural Health	2.3%	1,721	\$13,853,420	0.4%	1.5% - 3.1%
Community Mental Health Centers	0.5%	96	\$1,598,668	0.3%	(0.0%) - 1.0%
All Codes With Less Than 30 Claims	0.0%	4	N/A	N/A	N/A
Home Health (Part B Only)	0.0%	67	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	4.2%	34,458	\$4,745,626,984	0.3%	3.7% - 4.7%

Table E4: Paid Claims Error Rates by Service Type: Part A Inpatient Hospital PPS

PPS Acute Care Hospital Service Types Billed to Inpatient Hospital PPS (MS-DRG Groups)	Paid Claims Error Rate				
	Error Rate	Number of Line Items (Sample)	Projected Improper Payments	Standard Error	95% Confidence Interval
All Codes With Less Than 30 Claims	9.1%	1,267	\$6,883,073,837	1.1%	6.8% - 11.3%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	24.3%	103	\$1,416,348,286	4.2%	16.2% - 32.5%
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	47.2%	33	\$988,741,766	3.1%	41.2% - 53.3%
Peric Cardiovasc Proc W Drug-Eluting Stent (246 , 247)	17.1%	40	\$385,315,015	6.1%	5.1% - 29.1%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	5.1%	78	\$247,989,539	1.4%	2.5% - 7.8%
Chest Pain (313)	20.9%	49	\$168,421,077	6.0%	9.2% - 32.5%
G.I. Hemorrhage (377 , 378 , 379)	9.9%	44	\$149,527,576	1.8%	6.3% - 13.5%
Major Small & Large Bowel Procedures (329 , 330 , 331)	6.6%	34	\$149,091,352	3.9%	(1.0%) - 14.2%
Respiratory Infections & Inflammations (177 , 178 , 179)	6.4%	43	\$138,235,571	0.3%	5.8% - 7.0%
Esophagitis, Gastroent & Misc Digest Disorders (391 , 392)	12.6%	49	\$135,111,217	1.0%	10.5% - 14.6%
Kidney & Urinary Tract Infections (689 , 690)	9.6%	59	\$117,843,881	4.4%	1.0% - 18.3%
Nutritional & Misc Metabolic Disorders (640 , 641)	9.7%	63	\$115,574,973	1.6%	6.5% - 12.8%
Renal Failure (682 , 683 , 684)	4.5%	49	\$86,143,600	1.0%	2.7% - 6.4%
Syncope & Collapse (312)	11.2%	38	\$74,323,384	1.7%	7.9% - 14.5%
Heart Failure & Shock (291 , 292 , 293)	1.6%	120	\$72,755,513	0.8%	0.1% - 3.1%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	4.4%	67	\$64,116,976	1.4%	1.5% - 7.2%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	2.4%	71	\$62,310,615	0.9%	0.6% - 4.2%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	4.9%	35	\$53,990,166	2.9%	(0.8%) - 10.6%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	0.4%	76	\$8,601,782	0.0%	0.4% - 0.5%
Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	0.4%	36	\$7,780,135	0.2%	0.1% - 0.7%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	0.4%	52	\$7,029,328	0.2%	(0.1%) - 0.9%
Legacy DRG Claims	0.0%	47	N/A	N/A	N/A
All Type of Services (Incl. Codes Not Listed)	9.5%	2,453	\$11,332,325,591	0.9%	7.8% - 11.2%

Appendix F: Projected Improper Payments by Provider Type for each Claim Type (Details)

Appendix F presents error rates by provider type. The tables include the top provider types based on improper payments for providers that bill each type of contractor. All estimates are based on a minimum of 30 lines in the sample. This series of tables is sorted in descending order by projected improper payments.

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

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

Provider Types Billing to Part B	Paid Claims Error Rate				Provider Compliance Error Rate
	Error Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Internal Medicine	18.1%	\$1,692,839,881	4,107	15.7% - 20.5%	26.5%
Cardiology	18.0%	\$1,078,731,956	2,116	14.9% - 21.0%	27.7%
Family Practice	17.5%	\$823,994,663	2,969	14.7% - 20.3%	29.7%
Clinical Laboratory (Billing Independently)	16.0%	\$631,837,929	2,910	11.8% - 20.2%	21.7%
Diagnostic Radiology	14.3%	\$544,373,668	2,920	10.8% - 17.8%	22.8%
Hematology/Oncology	12.9%	\$460,343,064	514	4.5% - 21.4%	19.2%
Physical Therapist in Private Practice	19.4%	\$361,482,013	763	15.6% - 23.3%	25.2%
Orthopedic Surgery	12.9%	\$337,684,695	703	8.9% - 17.0%	30.2%
Chiropractic	43.9%	\$256,897,088	767	38.3% - 49.6%	55.0%
Radiation Oncology	11.4%	\$254,727,402	177	3.5% - 19.4%	13.5%
Emergency Medicine	11.3%	\$247,515,199	757	8.2% - 14.4%	17.4%
Ophthalmology	4.7%	\$232,668,590	1,154	3.3% - 6.1%	15.2%
Neurology	18.7%	\$231,574,099	343	13.0% - 24.4%	26.4%
Gastroenterology	14.2%	\$215,400,714	400	9.9% - 18.6%	18.8%
General Surgery	10.2%	\$207,172,940	435	6.8% - 13.5%	18.0%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	4.1%	\$205,210,656	583	2.4% - 5.7%	11.4%
Rheumatology	25.4%	\$195,502,581	168	6.8% - 44.0%	28.7%
Nephrology	11.9%	\$192,724,631	421	8.6% - 15.3%	18.2%
Pulmonary Disease	14.7%	\$181,621,163	409	9.3% - 20.0%	28.4%
Podiatry	12.0%	\$178,941,032	819	8.6% - 15.3%	19.9%
Urology	10.4%	\$169,261,201	511	6.8% - 14.1%	17.6%
Obstetrics/Gynecology	25.2%	\$165,736,210	249	5.9% - 44.5%	29.6%
Medical Oncology	11.2%	\$162,770,786	206	7.0% - 15.4%	23.7%
Thoracic Surgery	32.2%	\$160,889,897	38	31.9% - 32.6%	33.5%
Psychiatry	17.7%	\$156,371,491	422	12.5% - 23.0%	27.8%
Anesthesiology	7.8%	\$111,434,955	429	4.7% - 10.9%	21.1%
Nurse Practitioner	13.4%	\$108,074,933	680	9.7% - 17.2%	21.7%
Pathology	11.4%	\$107,310,765	406	7.2% - 15.6%	20.4%
Physical Medicine and	13.0%	\$106,533,621	260	8.8% - 17.2%	22.1%

Provider Types Billing to Part B	Paid Claims Error Rate				Provider Compliance Error Rate
	Error Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Rehabilitation					
Otolaryngology	15.9%	\$104,873,592	265	8.3% - 23.5%	29.2%
Clinical Psychologist	30.4%	\$103,992,333	138	13.7% - 47.1%	34.2%
Dermatology	4.4%	\$95,385,607	575	2.8% - 5.9%	9.6%
General Practice	13.1%	\$86,699,710	294	8.4% - 17.9%	24.7%
Clinical Social Worker	41.1%	\$76,029,416	140	20.9% - 61.2%	40.5%
Endocrinology	20.5%	\$75,738,415	143	9.7% - 31.2%	32.7%
Infectious Disease	8.0%	\$65,658,731	117	5.3% - 10.7%	13.8%
All Provider Types With Less Than 30 Claims	5.2%	\$59,760,401	327	3.3% - 7.0%	26.0%
Physician Assistant	9.8%	\$59,414,588	421	6.2% - 13.3%	19.3%
Ambulatory Surgical Center	2.4%	\$55,538,292	186	0.5% - 4.3%	10.1%
Optometry	8.3%	\$53,012,599	369	5.5% - 11.0%	18.4%
Vascular Surgery	11.2%	\$47,200,702	115	8.0% - 14.5%	24.8%
Critical Care (Intensivists)	15.8%	\$37,630,305	47	9.0% - 22.5%	21.6%
Occupational Therapist in Private Practice	27.6%	\$31,959,852	54	20.4% - 34.7%	34.9%
Portable X-Ray Supplier (Billing Independently)	14.4%	\$29,500,431	98	3.1% - 25.7%	30.1%
Allergy/Immunology	16.8%	\$29,383,314	113	8.3% - 25.2%	22.4%
Plastic and Reconstructive Surgery	10.1%	\$25,909,233	46	6.2% - 13.9%	24.2%
Neurosurgery	2.8%	\$25,901,344	92	1.0% - 4.6%	17.5%
Interventional Pain Management	11.7%	\$23,410,192	80	7.0% - 16.5%	23.7%
Independent Diagnostic Testing Facility (IDTF)	2.3%	\$20,610,678	140	0.1% - 4.6%	25.4%
Geriatric Medicine	9.3%	\$17,200,704	71	7.4% - 11.2%	13.7%
Certified Registered Nurse Anesthetist (CRNA)	2.2%	\$16,090,328	257	1.2% - 3.1%	11.6%
Interventional Radiology	6.8%	\$9,532,918	69	5.6% - 7.9%	4.1%
Audiologist (Billing Independently)	18.2%	\$5,375,201	30	11.6% - 24.7%	17.9%
Pediatric Medicine	5.6%	\$3,882,849	38	4.8% - 6.3%	14.5%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	\$0	138	0.0% - 0.0%	10.9%
All Provider Types	12.9%	\$10,939,319,559	30,965	12.1% - 13.8%	22.0%

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

Provider Types Billing to DME	Paid Claims Error Rate				Provider Compliance Error Rate
	Error Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval	
Medical supply company not included in 51, 52, or 53	76.0%	\$3,068,399,792	4,371	72.6% - 79.4%	76.6%
Pharmacy	74.8%	\$2,771,893,886	5,281	71.3% - 78.3%	76.0%
Medical Supply Company with Respiratory Therapist	73.8%	\$533,778,777	1,350	69.5% - 78.2%	74.9%
Individual orthotic personnel certified by an accrediting organization	92.2%	\$209,178,134	92	84.4% -100.1%	92.7%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	75.9%	\$176,835,353	85	50.3% -101.4%	75.5%
All Provider Types With Less Than 30 Claims	52.6%	\$113,334,840	201	34.4% - 70.8%	76.8%
Unknown Supplier/Provider	80.8%	\$97,262,771	162	68.3% - 93.3%	81.3%
Podiatry	59.1%	\$94,687,815	130	40.0% - 78.3%	62.9%
Medical supply company with orthotic personnel certified by an accrediting organization	66.5%	\$87,436,881	93	44.7% - 88.4%	66.3%
Individual prosthetic personnel certified by an accrediting organization	40.5%	\$70,433,124	45	14.3% - 66.7%	41.5%
Orthopedic Surgery	26.9%	\$9,990,612	59	4.1% - 49.7%	46.2%
Optician	45.2%	\$9,357,253	37	24.8% - 65.6%	58.3%
Optometry	37.7%	\$7,955,252	53	19.6% - 55.9%	46.5%
Ophthalmology	4.0%	\$848,258	37	(1.4%) - 9.3%	18.0%
All Provider Types	73.8%	\$7,251,392,747	11,996	71.5% - 76.1%	75.3%

Table F3: Error Rates and Improper Payments by Provider Type: Part A excluding Inpatient Hospital PPS

Provider Types Billing to Part A (excluding Inpatient Hospital PPS)	Paid Claims Error Rate			
	Error Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval
OPPS, Laboratory (an FI), Ambulatory (Billing an FI)	5.5%	\$1,706,563,667	23,357	4.8% - 6.3%
HHA	4.8%	\$995,517,962	1,723	3.6% - 6.0%
SNF	3.6%	\$923,003,213	1,677	2.3% - 4.9%
Hospice	2.5%	\$323,336,959	899	1.2% - 3.8%
ESRD	3.9%	\$298,310,567	715	2.3% - 5.5%
Critical Access Hospital (CAH) Outpatient Services	5.3%	\$214,648,018	2,756	3.5% - 7.1%
Inpatient Psychiatric Unit	4.7%	\$105,776,060	80	2.6% - 6.8%
Inpatient Rehab Unit	3.1%	\$74,766,789	46	2.3% - 4.0%
FQHC	6.9%	\$32,477,464	636	4.5% - 9.3%
Outpatient Rehab Facility (ORF)	5.2%	\$32,407,925	453	2.5% - 8.0%
Comprehensive Outpatient Rehab Facility (CORF)	10.2%	\$20,528,731	115	1.6% - 18.9%
RHCs	2.3%	\$13,853,420	1,721	1.5% - 3.1%
Inpatient Psychiatric Hospitals	0.4%	\$2,837,543	37	0.3% - 0.5%
Community Mental Health Center (CMHC)	0.5%	\$1,598,668	96	(0.0%) - 1.0%
All Codes With Less Than 30 Claims	0.0%	\$0	13	0.0% - 0.0%
Inpatient Critical Access Hospital	0.0%	\$0	97	0.0% - 0.0%
Inpatient Rehabilitation Hospitals	0.0%	\$0	37	0.0% - 0.0%
Overall	4.2%	\$4,745,626,984	34,458	3.7% - 4.7%

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

Provider Types Billing to Part A Inpatient Hospital PPS	Paid Claims Error Rate			
	Error Rate	Projected Improper Payments	Sampled Claims	95% Confidence Interval
DRG Short Term	9.8%	\$11,149,808,135	2,429	8.0% - 11.5%
All Codes With Less Than 30 Claims	3.6%	\$182,517,456	24	(1.4%) - 8.6%
Overall	9.5%	\$11,332,325,591	2,453	7.8% - 11.2%

Appendix G – Error Rates and Type of Error by Provider Type for each Claim Type

Table G1: Paid Claims Error Rates by Provider Type and Type of Error: Part B

Provider Types Billed to Part B	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Chiropractic	43.9%	767	0.0%	39.5%	57.1%	0.7%	2.6%
Clinical Social Worker	41.1%	140	1.9%	56.9%	41.2%	0.0%	0.0%
Thoracic Surgery	32.2%	38	0.0%	95.6%	0.0%	4.4%	0.0%
Clinical Psychologist	30.4%	138	3.8%	81.8%	12.2%	2.2%	0.0%
Occupational Therapist in Private Practice	27.6%	54	0.0%	93.9%	2.5%	3.6%	0.0%
Rheumatology	25.4%	168	0.2%	26.7%	65.3%	7.7%	0.0%
Obstetrics/Gynecology	25.2%	249	0.4%	70.6%	10.7%	17.5%	0.7%
Endocrinology	20.5%	143	3.2%	63.1%	2.9%	30.9%	0.0%
Physical Therapist in Private Practice	19.4%	763	0.1%	92.2%	4.0%	2.4%	1.2%
Neurology	18.7%	343	17.8%	29.5%	19.7%	33.1%	0.0%
Audiologist (Billing Independently)	18.2%	30	0.0%	49.8%	50.2%	0.0%	0.0%
Internal Medicine	18.1%	4,107	1.1%	56.5%	4.7%	36.9%	0.8%
Cardiology	18.0%	2,116	0.5%	64.3%	14.0%	21.2%	0.0%
Psychiatry	17.7%	422	1.9%	51.8%	9.8%	36.2%	0.2%
Family Practice	17.5%	2,969	1.5%	55.4%	4.0%	39.2%	0.0%
Allergy/Immunology	16.8%	113	0.0%	57.2%	25.6%	17.2%	0.0%
Clinical Laboratory (Billing Independently)	16.0%	2,910	0.8%	59.3%	35.5%	4.0%	0.4%
Otolaryngology	15.9%	265	0.0%	53.3%	14.2%	32.5%	0.0%
Critical Care (Intensivists)	15.8%	47	0.0%	54.2%	0.1%	45.7%	0.0%
Pulmonary Disease	14.7%	409	0.0%	51.1%	8.2%	40.7%	0.0%
Portable X-Ray Supplier (Billing Independently)	14.4%	98	0.0%	80.7%	18.6%	0.7%	0.0%
Diagnostic Radiology	14.3%	2,920	1.3%	78.1%	20.5%	0.2%	0.0%
Gastroenterology	14.2%	400	0.0%	63.6%	7.4%	29.0%	0.0%
Nurse Practitioner	13.4%	680	3.5%	68.9%	0.7%	26.9%	0.0%
General Practice	13.1%	294	12.8%	57.9%	1.7%	27.0%	0.6%
Physical Medicine and Rehabilitation	13.0%	260	0.0%	60.6%	6.7%	32.7%	0.0%
Orthopedic Surgery	12.9%	703	0.0%	68.7%	5.4%	25.1%	0.8%
Hematology/Oncology	12.9%	514	0.2%	79.5%	6.5%	13.8%	0.0%
Podiatry	12.0%	819	2.0%	61.5%	16.3%	19.1%	1.2%
Nephrology	11.9%	421	2.4%	54.0%	1.6%	42.0%	0.0%
Interventional Pain Management	11.7%	80	0.0%	60.8%	18.4%	6.5%	14.3%
Radiation Oncology	11.4%	177	0.0%	93.1%	3.4%	3.5%	0.0%
Pathology	11.4%	406	0.2%	79.7%	19.1%	1.1%	0.0%
Emergency Medicine	11.3%	757	1.3%	49.9%	1.5%	46.9%	0.4%
Vascular Surgery	11.2%	115	4.6%	57.5%	2.6%	35.3%	0.0%

Provider Types Billed to Part B	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Medical Oncology	11.2%	206	8.2%	78.3%	7.7%	5.8%	0.0%
Urology	10.4%	511	0.2%	66.9%	5.2%	25.2%	2.4%
General Surgery	10.2%	435	0.0%	47.6%	10.5%	41.9%	0.0%
Plastic and Reconstructive Surgery	10.1%	46	0.0%	38.2%	0.8%	61.0%	0.0%
Physician Assistant	9.8%	421	2.2%	60.0%	3.9%	34.0%	0.0%
Geriatric Medicine	9.3%	71	0.0%	3.0%	0.0%	97.0%	0.0%
Optometry	8.3%	369	2.7%	47.9%	11.3%	38.2%	0.0%
Infectious Disease	8.0%	117	0.0%	47.4%	0.0%	52.6%	0.0%
Anesthesiology	7.8%	429	0.0%	67.6%	13.1%	10.2%	9.1%
Interventional Radiology	6.8%	69	8.9%	80.9%	3.4%	6.8%	0.0%
Pediatric Medicine	5.6%	38	0.0%	56.1%	0.1%	43.8%	0.0%
All Provider Types With Less Than 30 Claims	5.2%	327	0.0%	61.5%	3.8%	34.7%	0.0%
Ophthalmology	4.7%	1,154	0.2%	74.9%	4.9%	20.1%	0.0%
Dermatology	4.4%	575	5.8%	63.2%	1.9%	26.2%	2.9%
Ambulance Service Supplier (e.g., private ambulance companies, funeral homes)	4.1%	583	7.3%	19.5%	62.2%	11.0%	0.0%
Neurosurgery	2.8%	92	0.0%	33.1%	0.0%	66.9%	0.0%
Ambulatory Surgical Center	2.4%	186	0.0%	52.8%	43.6%	3.6%	0.0%
Independent Diagnostic Testing Facility (IDTF)	2.3%	140	0.0%	68.4%	31.6%	0.0%	0.0%
Certified Registered Nurse Anesthetist (CRNA)	2.2%	257	0.0%	84.7%	0.0%	15.3%	0.0%
Mass Immunization Roster Billers (Mass Immunizers have to roster bill assigned claims and can only bill for immunizations)	0.0%	138	N/A	N/A	N/A	N/A	N/A
All Provider Types	12.9%	30,965	1.5%	61.8%	13.2%	22.9%	0.5%

Table G2: Paid Claims Error Rates by Provider Type and Type of Error: DME

Provider Types Billed to DME	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Individual orthotic personnel certified by an accrediting organization	92.2%	92	0.4%	63.4%	36.1%	0.1%	0.0%
Unknown Supplier/Provider	80.8%	162	0.0%	58.6%	41.2%	0.0%	0.1%
Medical supply company not included in 51, 52, or 53	76.0%	4,371	0.9%	61.7%	37.0%	0.1%	0.2%
Medical supply company with prosthetic/orthotic personnel certified by an accrediting organization	75.9%	85	0.0%	37.8%	62.2%	0.0%	0.0%
Pharmacy	74.8%	5,281	1.2%	63.0%	35.1%	0.1%	0.5%
Medical Supply Company with Respiratory Therapist	73.8%	1,350	0.1%	59.4%	39.8%	0.5%	0.2%
Medical supply company with orthotic personnel certified by an accrediting organization	66.5%	93	0.0%	64.2%	35.1%	0.3%	0.5%
Podiatry	59.1%	130	1.8%	64.3%	31.2%	0.0%	2.8%
All Provider Types With Less Than 30 Claims	52.6%	201	1.6%	52.3%	46.1%	0.0%	0.0%
Optician	45.2%	37	0.0%	56.5%	43.5%	0.0%	0.0%
Individual prosthetic personnel certified by an accrediting organization	40.5%	45	2.7%	71.1%	26.1%	0.0%	0.0%
Optometry	37.7%	53	0.0%	50.7%	49.3%	0.0%	0.0%
Orthopedic Surgery	26.9%	59	27.1%	49.2%	23.8%	0.0%	0.0%
Ophthalmology	4.0%	37	0.0%	0.0%	100.0%	0.0%	0.0%
All Provider Types	73.8%	11,996	1.0%	61.4%	37.1%	0.1%	0.4%

Table G3: Paid Claims Error Rates by Provider Type and Type of Error: Part A excluding Inpatient Hospital PPS

Provider Types Billed to Part A excluding Inpatient Hospital PPS	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
Comprehensive Outpatient Rehab Facility (CORF)	10.2%	115	11.3%	87.2%	0.0%	1.5%	0.0%
FQHC	6.9%	636	2.6%	94.8%	2.6%	0.0%	0.0%
OPPS, Laboratory (an FI), Ambulatory (Billing an FI)	5.5%	23,357	0.3%	79.9%	15.2%	4.4%	0.2%
Critical Access Hospital (CAH) Outpatient Services	5.3%	2,756	0.2%	81.2%	14.1%	4.2%	0.3%
Outpatient Rehab Facility (ORF)	5.2%	453	22.0%	73.5%	0.3%	3.4%	0.7%
HHA	4.8%	1,723	3.1%	27.5%	60.1%	6.5%	2.7%
Inpatient Psychiatric Unit	4.7%	80	0.0%	82.3%	0.0%	0.0%	17.7%

Provider Types Billed to Part A excluding Inpatient Hospital PPS	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
ESRD	3.9%	715	0.4%	85.3%	9.7%	4.5%	0.0%
SNF	3.6%	1,677	0.1%	45.7%	20.2%	32.8%	1.2%
Inpatient Rehab Unit	3.1%	46	0.0%	100.0%	0.0%	0.0%	0.0%
Hospice	2.5%	899	4.8%	27.6%	64.4%	0.3%	2.9%
RHCs	2.3%	1,721	8.7%	88.1%	3.2%	0.0%	0.0%
Community Mental Health Center (CMHC)	0.5%	96	50.9%	0.0%	49.1%	0.0%	0.0%
Inpatient Psychiatric Hospitals	0.4%	37	0.0%	100.0%	0.0%	0.0%	0.0%
All Codes With Less Than 30 Claims	0.0%	13	N/A	N/A	N/A	N/A	N/A
Inpatient Critical Access Hospital	0.0%	97	N/A	N/A	N/A	N/A	N/A
Inpatient Rehabilitation Hospitals	0.0%	37	N/A	N/A	N/A	N/A	N/A
All Provider Types	4.2%	34,458	1.4%	59.6%	27.7%	9.8%	1.5%

Table G4: Paid Claims Error Rates by Provider Type and Type of Error: Part A Inpatient Hospital PPS

Provider Types Billed to Part A Inpatient Hospital PPS	Paid Claims Error Rate	Number of Claims in Sample	Type of Error				
			No Documentation	Insufficient Documentation	Medically Unnecessary Services	Incorrect Coding	Other
DRG Short Term	9.8%	2,429	0.2%	9.3%	73.0%	17.4%	0.1%
All Codes With Less Than 30 Claims	3.6%	24	0.0%	20.3%	0.0%	79.7%	0.0%
All Provider Types	9.5%	2,453	0.2%	9.5%	71.8%	18.4%	0.1%

Appendix H: Coding Problems

E & M Codes

The CMS has historically recognized problems with certain procedure codes. In a letter dated June 1, 2000, the CMS Administrator notified Medicare physicians that CPT codes 99233 and 99214 for evaluation and management (E&M) services had accounted for a significant proportion of the FY 1998 and FY 1999 coding errors. The Administrator noted that documentation for many of these services more appropriately supported CPT codes 99231 and 99212, respectively, and reminded providers to document the specific procedures performed. While other E&M codes also contribute significantly to the error rate, analysis indicates continuing problems with the listed procedure codes.

CPT code 99233, subsequent hospital care. The physician should typically spend 35 minutes with the patient and perform at least two of these key procedures: a detailed interval patient history, a detailed examination, and/or medical decision making of high complexity.

Table H1 summarizes historical error rate data for subsequent hospital care as described by CPT code 99233.

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%
Nov 2010	697	366	52.5%

CPT code 99214, office or other outpatient visit. The physician should typically spend 25 minutes face-to-face with the patient and perform at least two of the following procedures: a detailed patient history, a detailed examination, and/or medical decision making of moderate complexity.

Table H2 summarizes historical error rate data for an office or other outpatient visit as described by CPT code 99214.

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%
Nov 2010	2,829	569	20.1%

CPT code 99232, subsequent hospital care. For this billing code, the physician should typically spend 25 minutes at bedside with the patient and should perform at least two of the following key procedures: an expanded problem-focused interval patient history, an expanded problem-focused examination, and/or medical decision making of moderate complexity.

Table H3 summarizes historical error rate data for subsequent hospital care as described by CPT code 99232.

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%
Nov 2010	1,693	290	17.1%

The American Medical Association (AMA) developed the E&M codes that Medicare physicians use when submitting claims for payment. In 2003, there were 21 categories of E&M codes, including categories such as office or other outpatient service, consultations, emergency department services, and critical care services. Within each category of codes there is a range of three to five levels of HCPCS codes that determines the level of service and the level of payment. There are three key descriptors used to determine the appropriate HCPCS code: history, examination, and medical decision-making. There are four other components, including counseling, coordination of care, nature of presenting problem, and time that are contributory factors, but they are not used to determine the appropriate HCPCS code for billing purposes.

Table H4 lists all E&M codes with 2,000 or more claims in the CERT sample. The table provides information on the types of error found for each code. The table is sorted in descending order by error rate.

Table H4: E&M Codes with more than 2,000 claims reviewed

Part B Provider Type	Paid/Allowed Claims Error Rate				Provider Compliance Error Rate	No Resolution Rate
	Paid Error Rate	Projected Improper Payments	Number of Claims in Sample	95% Confidence Interval		
99214	11.8%	\$657,933,414	2,824	10.5% - 13.1%	17.2%	0.0%
99213	9.8%	\$478,954,837	3,880	8.5% - 11.0%	15.5%	0.0%

The OIG and CMS have noted problems with certain procedure codes for the past several years. These problematic codes include CPT codes 99214 (office or other outpatient visit), 99232 (subsequent hospital care level 2) and 99233 (subsequent hospital care level 3).

Table H5 provides information on the impact of 1 level disagreement between Carriers/Part B MAC and providers when coding evaluation and management codes.

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

Final E & M Codes	Incorrect Coding Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Office/outpatient visit, est (99214)	5.2%	\$288,450,608	4.5% - 5.9%
Subsequent hospital care (99233)	12.9%	\$213,024,855	9.6% - 16.1%
Office/outpatient visit, est (99213)	2.1%	\$103,449,276	1.6% - 2.6%
Emergency dept visit (99285)	6.3%	\$73,303,124	4.4% - 8.1%
Office/outpatient visit, est (99215)	8.9%	\$69,724,356	7.2% - 10.7%
Subsequent hospital care (99232)	2.4%	\$64,277,515	1.3% - 3.4%
Inpatient consultation (99254)	9.8%	\$62,902,273	7.6% - 12.0%
Office consultation (99244)	5.9%	\$47,233,817	4.1% - 7.7%
Initial hospital care (99222)	10.1%	\$37,262,151	7.3% - 12.9%
Initial hospital care (99223)	3.1%	\$36,665,769	0.9% - 5.3%
Nursing fac care, subseq (99309)	6.9%	\$33,361,309	5.3% - 8.5%
Office/outpatient visit, est (99212)	5.0%	\$28,627,781	3.4% - 6.5%
Office/outpatient visit, new (99203)	6.9%	\$28,457,568	5.1% - 8.8%

Final E & M Codes	Incorrect Coding Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Subsequent hospital care (99231)	7.4%	\$26,249,996	2.3% - 12.5%
Office consultation (99243)	6.7%	\$25,488,028	4.8% - 8.6%
Office/outpatient visit, new (99204)	5.1%	\$22,113,462	3.2% - 7.1%
Emergency dept visit (99283)	9.2%	\$17,041,127	5.5% - 12.9%
Inpatient consultation (99253)	5.5%	\$13,633,457	3.5% - 7.5%
Nursing fac care, subseq (99308)	3.0%	\$13,259,630	1.8% - 4.3%
Emergency dept visit (99284)	2.1%	\$11,693,423	0.8% - 3.4%
All Other Codes	0.1%	\$71,683,732	0.1% - 0.2%
Overall	1.5%	\$1,287,903,259	1.4% - 1.7%

Over-Coding Errors

For most of the coding errors, the medical reviewers determined that providers submitted documentation that supported a lower code than the code submitted (in these cases, providers are said to have over-coded claims).

Tables H6 through H9 lists the top twenty services (if available) with the highest dollars in error due to overcoding for each claim type (Part B, DME, Part A excluding inpatient hospital PPS, and Part A Inpatient Hospital PPS). All estimates presented in tables H6 through H9 are based on a minimum of 30 claims in the sample. Data in these tables are sorted by projected improper payments.

Table H6: Services with Overcoding Errors: Part B

Service Billed to Part B (HCPCS)	Overcoding Errors		
	Paid Claims Error Rate	Projected Improper Payments	95% Confidence Interval
Office visits - established	4.4%	\$526,130,526	3.9% - 4.9%
Consultations	17.7%	\$509,233,545	15.6% - 19.8%
Hospital visit - subsequent	6.8%	\$365,181,180	5.3% - 8.3%
Hospital visit - initial	16.8%	\$287,452,560	13.9% - 19.8%
Office visits - new	15.2%	\$185,701,877	12.3% - 18.1%
Nursing home visit	8.8%	\$141,014,266	6.7% - 10.9%
Emergency room visit	5.1%	\$98,907,982	3.8% - 6.5%
Hospital visit - critical care	3.5%	\$29,397,142	(0.4%) - 7.4%
Ambulance	0.4%	\$21,848,439	0.1% - 0.8%
Lab tests - other (Medicare fee schedule)	0.9%	\$21,140,041	(0.3%) - 2.2%
Dialysis services (Medicare Fee Schedule)	2.5%	\$20,635,369	1.4% - 3.6%
Minor procedures - other (Medicare fee schedule)	0.3%	\$12,437,996	0.1% - 0.6%
Home visit	3.2%	\$9,135,263	1.0% - 5.3%
Lab tests - blood counts	2.4%	\$7,880,061	1.9% - 2.9%
Other tests - other	0.6%	\$6,987,720	(0.1%) - 1.2%
Advanced imaging - CAT/CT/CTA: other	0.4%	\$4,825,889	(0.3%) - 1.1%
Major procedure - Other	0.4%	\$4,516,010	(0.4%) - 1.3%
Other drugs	0.1%	\$4,457,089	(0.0%) - 0.2%

Service Billed to Part B (HCPCS)	Overcoding Errors		
	Paid Claims Error Rate	Projected Improper Payments	95% Confidence Interval
Ambulatory procedures - other	0.6%	\$3,565,300	(0.5%) - 1.6%
Specialist - psychiatry	0.3%	\$2,546,082	(0.1%) - 0.6%
All Other Codes	0.1%	\$24,598,192	0.0% - 0.1%
Overall	2.7%	\$2,287,592,527	2.5% - 2.9%

Table H7: Services with Overcoding Errors: DME

Service Billed to DME (HCPCS)	Overcoding Errors		
	Paid Claims Error Rate	Projected Improper Payments	Paid Claims Error Rate
Hospital Beds/Accessories	1.4%	\$2,653,607	(0.0%) - 2.7%
Oxygen Supplies/Equipment	0.2%	\$2,591,415	(0.0%) - 0.3%
Support Surfaces	2.4%	\$1,943,953	(2.1%) - 6.8%
Wheelchairs Manual	0.3%	\$767,058	(0.1%) - 0.8%
Upper Limb Orthoses	0.9%	\$588,478	(0.4%) - 2.2%
Surgical Dressings	0.2%	\$408,433	(0.2%) - 0.6%
Tracheostomy Supplies	1.6%	\$299,647	0.9% - 2.4%
Patient Lift	1.1%	\$225,498	(1.0%) - 3.2%
Glucose Monitor	0.0%	\$208,193	(0.0%) - 0.0%
Nebulizers & Related Drugs	0.0%	\$146,127	(0.0%) - 0.1%
Urological Supplies	0.0%	\$71,842	(0.0%) - 0.1%
Suction Pump	0.4%	\$58,306	(0.4%) - 1.2%
Wheelchairs Options/Accessories	0.0%	\$48,277	(0.0%) - 0.0%
Immunosuppressive Drugs	0.0%	\$3,337	(0.0%) - 0.0%
Overall	0.1%	\$10,014,171	0.0% - 0.2%

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		
	Paid Claims Error Rate	Projected Improper Payments	95% Confidence Interval
SNF Inpatient	1.2%	\$277,701,483	0.6% - 1.8%
Hospital Outpatient	0.1%	\$40,490,637	0.1% - 0.2%
Home Health	0.2%	\$33,742,477	0.1% - 0.3%
Clinic ESRD	0.2%	\$13,359,867	(0.0%) - 0.4%
Critical Access Hospital	0.1%	\$4,875,801	0.1% - 0.2%
SNF Inpatient Part B	0.2%	\$3,858,694	(0.0%) - 0.5%
Hospital Other Part B	0.4%	\$1,776,778	0.3% - 0.6%
Clinic OPT	0.2%	\$956,359	(0.0%) - 0.3%
Hospital based hospice	0.1%	\$724,545	(0.0%) - 0.1%
Clinic CORF	0.1%	\$300,218	0.0% - 0.3%
SNF Outpatient	0.1%	\$245,109	(0.0%) - 0.3%
Hospital Inpatient Part B	0.1%	\$202,729	0.0% - 0.1%
Nonhospital based hospice	0.0%	\$146,951	(0.0%) - 0.0%
Overall	0.3%	\$378,381,647	0.2% - 0.5%

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

Service Billed to Part A Inpatient Hospital PPS (Type of Bill)	Overcoding Errors		
	Paid Claims Error Rate	Projected Improper Payments	95% Confidence Interval
Permanent Cardiac Pacemaker Implant (242 , 243 , 244)	8.6%	\$179,733,755	7.3% - 9.9%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	3.2%	\$156,737,772	0.7% - 5.8%
Major Small & Large Bowel Procedures (329 , 330 , 331)	3.6%	\$81,512,478	(3.0%) - 10.2%
Respiratory Infections & Inflammations (177 , 178 , 179)	2.6%	\$55,366,628	2.3% - 2.9%
Acute Myocardial Infarction, Discharged Alive (280 , 281 , 282)	4.0%	\$43,964,048	(1.7%) - 9.7%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	1.5%	\$38,597,803	0.8% - 2.1%
Kidney & Urinary Tract Infections (689 , 690)	2.8%	\$34,958,482	2.1% - 3.6%
G.I. Hemorrhage (377 , 378 , 379)	1.8%	\$26,828,090	1.2% - 2.3%
Heart Failure & Shock (291 , 292 , 293)	0.4%	\$16,974,447	(0.1%) - 0.8%
Renal Failure (682 , 683 , 684)	0.4%	\$8,432,950	(0.4%) - 1.3%
Hip & Femur Procedures Except Major Joint (480 , 481 , 482)	0.4%	\$7,780,135	0.1% - 0.7%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	0.4%	\$7,029,328	(0.1%) - 0.9%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	0.3%	\$4,810,938	(0.2%) - 0.8%
Nutritional & Misc Metabolic Disorders (640 , 641)	0.3%	\$3,768,830	(0.2%) - 0.8%
Syncope & Collapse (312)	0.5%	\$3,478,031	0.4% - 0.7%
Chest Pain (313)	0.1%	\$740,128	(0.1%) - 0.3%
All Other Codes	0.9%	\$691,160,531	0.5% - 1.3%
Overall	1.1%	\$1,361,874,375	0.7% - 1.6%

Appendix I – Overpayments

Tables I1 through I4 provide the service-specific overpayment rates for each claim type (Part B/DME/Part A excluding Inpatient Hospital PPS and Part A Inpatient Hospital PPS). Each table contains information for the top 20 improperly paid services. FY 2004 was the first year that CMS included 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	6,815	10,509	\$119,050	\$1,219,556	\$2,792,603,577	9.9%
Office/outpatient visit, est (99214)	2,824	2,829	\$25,721	\$235,649	\$651,775,405	11.7%
Subsequent hospital care (99233)	459	692	\$18,454	\$64,619	\$562,554,020	34.0%
Office/outpatient visit, est (99213)	3,880	3,931	\$18,082	\$215,884	\$429,141,455	8.7%
Subsequent hospital care (99232)	997	1,686	\$15,287	\$114,382	\$348,551,943	12.9%
Initial hospital care (99223)	268	268	\$13,565	\$45,975	\$345,973,733	29.2%
Therapeutic exercises (97110)	768	921	\$9,849	\$43,499	\$251,416,322	24.0%
Office consultation (99244)	215	215	\$7,124	\$35,446	\$184,461,383	23.0%
Office/outpatient visit, est (99215)	304	306	\$7,683	\$33,763	\$178,324,303	22.9%
Tte w/doppler, complete (93306)	272	274	\$6,573	\$38,287	\$174,271,831	18.2%
Inpatient consultation (99254)	183	183	\$7,294	\$26,344	\$165,679,326	25.8%
Chiropractic manipulation (98941)	472	625	\$7,454	\$17,702	\$160,486,984	42.0%
Critical care, first hour (99291)	133	156	\$4,117	\$32,144	\$146,132,429	18.4%
Radiation tx delivery, imrt (77418)	34	59	\$2,728	\$24,107	\$124,174,434	18.3%
Emergency dept visit (99285)	325	325	\$5,256	\$51,253	\$113,998,212	9.8%
Nursing fac care, subseq (99309)	224	247	\$3,631	\$17,639	\$112,763,569	23.2%
Psytx, off, 45-50 min (90806)	168	250	\$3,721	\$11,502	\$111,225,829	37.6%
bls (A0428)	258	285	\$5,905	\$53,708	\$107,709,170	8.7%
Inpatient consultation (99255)	96	96	\$4,588	\$16,973	\$106,664,510	27.8%
Office/outpatient visit, new (99204)	157	157	\$4,594	\$19,168	\$98,986,723	23.0%
All Other Codes	20,453	36,030	\$156,480	\$1,315,402	\$3,549,810,169	11.8%
Combined	30,965	60,044	\$447,155	\$3,633,003	\$10,716,705,326	12.7%

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	2,180	3,320	\$436,191	\$688,990	\$2,219,669,767	67.1%
Oxygen concentrator (E1390)	1,828	1,892	\$216,450	\$284,923	\$1,017,814,585	75.2%
Blood glucose/reagent strips (A4253)	2,240	2,258	\$200,681	\$234,367	\$943,403,096	86.1%
PWC gp 2 std cap chair (K0823)	40	40	\$124,081	\$127,722	\$597,665,902	96.6%
Hosp bed semi-electr w/ matt (E0260)	368	382	\$30,861	\$35,864	\$145,018,777	87.1%
Tacrolimus oral per 1 MG (J7507)	68	69	\$22,880	\$40,216	\$116,577,207	63.1%
Budesonide non-comp unit (J7626)	136	141	\$21,225	\$45,034	\$107,926,519	49.6%
Lancets per box (A4259)	1,293	1,300	\$20,690	\$23,910	\$100,675,794	86.5%
Cont airway pressure device (E0601)	465	498	\$20,943	\$34,508	\$100,430,351	61.5%
Mycophenolate mofetil oral (J7517)	62	63	\$22,237	\$35,959	\$98,131,932	67.9%
Portable gaseous O2 (E0431)	959	991	\$18,316	\$24,090	\$84,615,502	74.6%
Diab shoe for density insert (A5500)	183	199	\$17,163	\$22,215	\$82,243,307	76.4%
High strength ltwt whlchr (K0004)	141	155	\$14,089	\$14,573	\$73,099,061	97.7%
Enteral feed supp pump per d (B4035)	120	121	\$18,296	\$28,268	\$71,454,022	62.7%
EF spec metabolic noninherit (B4154)	43	43	\$13,603	\$17,026	\$68,530,204	83.0%
Arformoterol non-comp unit (J7605)	46	46	\$11,273	\$15,465	\$64,068,407	76.8%
Multi den insert direct form (A5512)	111	125	\$12,208	\$15,586	\$63,189,956	77.8%
Disp fee inhal drugs/30 days (Q0513)	578	584	\$12,071	\$18,110	\$56,133,134	67.2%
Nasal application device (A7034)	177	177	\$11,957	\$16,748	\$56,120,444	70.0%
RAD w/o backup non-inv intfc (E0470)	96	98	\$10,917	\$16,394	\$54,648,342	69.2%
All Other Codes	5,656	7,913	\$236,102	\$329,760	\$1,129,876,487	72.6%
Combined	11,996	20,415	\$1,492,233	\$2,069,727	\$7,251,292,798	73.8%

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	19,931	\$391,548	\$7,692,481	\$1,486,269,897	5.2%
Home Health	1,656	\$182,766	\$4,330,569	\$961,058,972	4.6%
SNF Inpatient	1,055	\$178,100	\$5,140,095	\$754,307,160	3.2%
Clinic ESRD	715	\$65,639	\$1,817,602	\$298,073,608	3.9%
Nonhospital based hospice	788	\$49,231	\$2,409,173	\$269,121,243	2.4%
Critical Access Hospital	2,756	\$69,841	\$1,228,162	\$206,860,603	5.1%
Hospital Inpatient (Part A)	306	\$45,911	\$2,514,919	\$183,380,391	2.1%
SNF Inpatient Part B	521	\$29,846	\$370,733	\$122,993,920	7.4%
Hospital Other Part B	3,260	\$29,399	\$119,183	\$117,592,901	27.2%
Hospital based hospice	111	\$12,362	\$320,861	\$54,215,716	3.8%
Hospital Inpatient Part B	115	\$5,994	\$73,857	\$44,512,459	11.2%
Clinic – Freestanding (Effective April 1, 2010)	636	\$3,888	\$59,530	\$32,477,464	6.9%
Clinic OPT	453	\$8,963	\$143,689	\$32,257,014	5.2%
SNF Outpatient	101	\$3,609	\$45,467	\$24,628,531	13.3%
Clinic CORF	115	\$3,889	\$52,747	\$20,528,731	10.2%
Hospital Swing Bed	51	\$3,508	\$386,997	\$13,928,431	1.2%
Clinical Rural Health	1,721	\$4,184	\$167,255	\$13,853,420	2.3%
Community Mental Health Centers	96	\$605	\$85,041	\$1,598,668	0.5%
All Other Codes	71	\$0	\$15,560	\$0	0.0%
Combined	34,458	\$1,089,284	\$26,973,921	\$4,637,659,129	4.1%

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
All Codes With Less Than 30 Claims	1,829	\$1,537,707	\$20,818,825	\$8,188,023,157	8.3%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	94	\$219,048	\$1,080,032	\$1,371,044,502	26.1%
Perc Cardiovasc Proc W Drug-Eluting Stent W/O Mcc (247)	30	\$78,009	\$288,243	\$241,666,314	21.2%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	65	\$45,671	\$798,461	\$229,006,153	5.0%
Chest Pain (313)	49	\$46,670	\$156,619	\$168,421,077	20.9%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	38	\$25,244	\$145,597	\$121,594,263	15.4%
Nutritional & Misc Metabolic Disorders W/O Mcc (641)	36	\$17,877	\$151,650	\$74,795,071	14.7%

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
Syncope & Collapse (312)	38	\$18,325	\$147,549	\$74,323,384	11.2%
Kidney & Urinary Tract Infections W/O Mcc (690)	36	\$13,348	\$152,359	\$70,736,043	10.9%
Simple Pneumonia & Pleurisy W Cc (194)	31	\$5,124	\$186,405	\$30,689,234	4.3%
Heart Failure & Shock W Mcc (291)	54	\$12,182	\$492,724	\$14,380,653	0.6%
Heart Failure & Shock W Cc (292)	45	\$7,445	\$255,688	\$9,370,294	0.6%
Chronic Obstructive Pulmonary Disease W/O Cc/Mcc (192)	30	\$2,438	\$118,971	\$8,601,782	1.4%
All Other Codes	78	\$0	\$312,700	\$0	0.0%
Combined	2,453	\$2,029,087	\$25,105,823	\$10,602,651,926	8.9%

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	79,872	\$5,057,759	\$57,782,473	\$33,208,309,179	10.2%

Appendix J - Underpayments

Appendix J provides data on Medicare FFS underpayments. Underpayments often occur when the medical reviewers determine that documentation supports a higher code than the code the provider submitted. In these cases, the providers are said to have “under-coded” claims, resulting in an “underpayment”. In other words, the Medicare claims processing contractors should have paid a higher fee schedule amount.

Tables J1 through J4 provide the service-specific underpayment rates for each claim type (Part B, DME, Part A excluding Inpatient Hospital PPS, Part A Inpatient Hospital PPS). Data in these tables is sorted in descending order by the projected underpaid dollar amount. All estimates in tables J1 through J4 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	Underpymt Rate
Office/outpatient visit, est (99213)	3,880	3,931	\$2,404	\$215,884	\$49,813,382	1.0%
Office/outpatient visit, est (99212)	789	791	\$1,994	\$25,495	\$41,264,754	7.2%
All Codes With Less Than 30 Claims	6,815	10,509	\$1,294	\$1,219,556	\$34,259,845	0.1%
Subsequent hospital care (99231)	295	463	\$821	\$16,577	\$26,249,435	7.4%
Emergency dept visit (99283)	164	164	\$816	\$8,864	\$16,069,982	8.7%
Office/outpatient visit, est (99211)	328	330	\$391	\$5,211	\$8,770,615	7.0%
Office/outpatient visit, est (99214)	2,824	2,829	\$215	\$235,649	\$6,158,010	0.1%
Nursing fac care, subseq (99307)	121	131	\$190	\$4,511	\$5,690,439	5.5%
Initial hospital care (99222)	138	139	\$204	\$15,605	\$5,660,148	1.5%
Nursing fac care, subseq (99308)	285	311	\$65	\$16,759	\$3,825,864	0.9%
Inpatient consultation (99254)	183	183	\$84	\$26,344	\$3,140,290	0.5%
Inpatient consultation (99253)	98	98	\$102	\$10,067	\$2,970,840	1.2%
Office consultation (99243)	158	158	\$115	\$17,120	\$2,617,364	0.7%
Subsequent hospital care (99232)	997	1,686	\$127	\$114,382	\$2,209,521	0.1%
Inpatient consultation (99252)	42	42	\$73	\$2,645	\$2,204,976	4.6%
Therapeutic exercises (97110)	768	921	\$95	\$43,499	\$1,870,818	0.2%
Destruct premalg les, 2-14 (17003)	147	153	\$79	\$4,678	\$1,719,957	1.9%
Home visit, est patient (99349)	36	37	\$41	\$3,854	\$869,689	0.9%
Chemo, iv infusion, addl hr (96415)	32	32	\$44	\$1,287	\$807,926	2.8%
Ground mileage (A0425)	570	597	\$35	\$41,066	\$676,246	0.1%
All Other Codes	21,059	36,539	\$451	\$1,603,949	\$5,764,133	0.0%
Combined	30,965	60,044	\$9,641	\$3,633,003	\$222,614,233	0.3%

Table J2: Service Specific Underpayment Rates: DME

Service Billed to DMEs (HCPCS)	Number of Claims in Sample	Number of Lines in Sample	Dollars Underpaid in Sample	Total Dollars Paid in Sample	Projected Dollars Underpaid	Underpymt Rate
Budesonide non-comp unit (J7626)	136	141	\$34	\$45,034	\$99,949	0.0%
Albuterol ipratrop non-comp (J7620)	294	297	\$0	\$9,155	\$0	0.0%
CPAP full face mask (A7030)	79	79	\$0	\$12,328	\$0	0.0%
Calibrator solution/chips (A4256)	688	690	\$0	\$6,708	\$0	0.0%
Diab shoe for density insert (A5500)	183	199	\$0	\$22,215	\$0	0.0%
Disp fee inhal drugs/30 days (Q0513)	578	584	\$0	\$18,110	\$0	0.0%
Drain ostomy pouch w/flange (A5063)	42	43	\$0	\$2,822	\$0	0.0%
Nebulizer with compression (E0570)	654	688	\$0	\$8,392	\$0	0.0%
Oxygen concentrator (E1390)	1,828	1,892	\$0	\$284,923	\$0	0.0%
Portable O2 contents, gas (E0443)	168	174	\$0	\$11,500	\$0	0.0%
Portable gas oxygen system (K0738)	149	154	\$0	\$6,815	\$0	0.0%
Replacement nasal cushion (A7032)	55	59	\$0	\$3,098	\$0	0.0%
Trapeze bar attached to bed (E0910)	53	55	\$0	\$687	\$0	0.0%
All Other Codes	9,683	15,360	\$0	\$1,637,939	\$0	0.0%
Combined	11,996	20,415	\$34	\$2,069,727	\$99,949	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	Underpymt Rate
Hospital Outpatient	19,931	19,931	\$10,484	\$7,692,481	\$43,878,150	0.2%
Home Health	1,656	1,656	\$5,962	\$4,330,569	\$34,458,989	0.2%
SNF Inpatient	1,055	1,055	\$6,274	\$5,140,095	\$18,359,096	0.1%
Critical Access Hospital	2,756	2,756	\$2,920	\$1,228,162	\$7,787,416	0.2%
SNF Inpatient Part B	521	521	\$320	\$370,733	\$2,714,506	0.2%
Hospital Other Part B	3,260	3,260	\$107	\$119,183	\$378,350	0.1%
Clinic ESRD	715	715	\$114	\$1,817,602	\$236,959	0.0%
Clinic OPT	453	453	\$33	\$143,689	\$150,911	0.0%
Hospital Inpatient Part B	115	115	\$1	\$73,857	\$3,479	0.0%
All Other Codes	3,996	3,996	\$0	\$6,057,550	\$0	0.0%
Combined	34,458	34,458	\$26,216	\$26,973,921	\$107,967,855	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	Underpymt Rate
All Codes With Less Than 30 Claims	1,829	1,829	\$157,329	\$20,818,825	\$661,274,706	0.7%
Heart Failure & Shock W Cc (292)	45	45	\$6,616	\$255,688	\$34,949,929	2.4%
Kidney & Urinary Tract Infections W/O Mcc (690)	36	36	\$3,722	\$152,359	\$12,930,822	2.0%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	65	65	\$4,162	\$798,461	\$10,980,002	0.2%
Heart Failure & Shock W Mcc (291)	54	54	\$2,901	\$492,724	\$8,644,786	0.3%
Nutritional & Misc Metabolic Disorders W/O Mcc (641)	36	36	\$226	\$151,650	\$800,101	0.2%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	38	38	\$57	\$145,597	\$93,318	0.0%
All Other Codes	350	350	\$0	\$2,290,519	\$0	0.0%
Combined	2,453	2,453	\$175,013	\$25,105,823	\$729,673,664	0.6%

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	Underpymt Rate
All	79,872	117,370	\$210,903	\$57,782,473	\$1,060,355,701	0.3%

Appendix K – Statistics and Other Information for the CERT Sample

The tables in this section of the appendix provide statistics and other information that can be calculated from the CERT sample data.

Tables K1 through K4 provides 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	10,509	1,486	14.1%
Complete cbc w/auto diff wbc (85025)	1,165	401	34.4%
Comprehen metabolic panel (80053)	961	168	17.5%
Office/outpatient visit, est (99213)	3,931	483	12.3%
Office/outpatient visit, est (99214)	2,829	569	20.1%
Prescrip not gen at encounte (G8445)	811	0	0.0%
Prothrombin time (85610)	841	225	26.8%
Routine venipuncture (36415)	2,449	467	19.1%
Subsequent hospital care (99232)	1,686	286	17.0%
Therapeutic exercises (97110)	921	208	22.6%
Other	33,941	6,299	18.6%
TOS Code			
Hospital visit - subsequent	3,204	818	25.5%
Lab tests - automated general profiles	1,463	260	17.8%
Lab tests - blood counts	1,413	457	32.3%
Lab tests - other (non-Medicare fee schedule)	7,363	1,418	19.3%
Lab tests - routine venipuncture (non Medicare fee schedule)	2,506	467	18.6%
Minor procedures - other (Medicare fee schedule)	3,706	778	21.0%
Office visits - established	8,484	1,509	17.8%
Specialist - ophthamology	1,666	114	6.8%
Specialist - other	2,378	36	1.5%
Standard imaging - chest	1,529	263	17.2%
Other	26,332	4,472	17.0%
Resolution Type			

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Automated	13,340	744	5.6%
Complex	27	5	18.5%
None	46,626	9,840	21.1%
Routine	51	3	5.9%
Diagnosis Code			
Arthropathies and related disorders	3,111	665	21.4%
Diseases of other endocrine glands	2,983	490	16.4%
Diseases of the blood and bloodforming organs	1,766	434	24.6%
Disorders of the eye and adnexa	3,103	226	7.3%
Dorsopathies	2,648	519	19.6%
Hypertensive disease	2,863	494	17.3%
Other forms of heart disease	2,669	591	22.1%
Other metabolic disorders and immunity disorders	2,330	427	18.3%
Persons encountering health services for specific procedures and aftercare	1,724	386	22.4%
Symptoms	6,316	1,041	16.5%
Other	30,531	5,319	17.4%

Table K2: Claims in Error: DME

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	3,320	1,641	49.4%
Blood glucose/reagent strips (A4253)	2,258	1,883	83.4%
Calibrator solution/chips (A4256)	690	576	83.5%
Cont airway pressure device (E0601)	498	270	54.2%
Disp fee inhal drugs/30 days (Q0513)	584	377	64.6%
Hosp bed semi-electr w/ matt (E0260)	382	292	76.4%
Lancets per box (A4259)	1,300	1,074	82.6%
Nebulizer with compression (E0570)	688	361	52.5%
Oxygen concentrator (E1390)	1,892	1,280	67.7%
Portable gaseous O2 (E0431)	991	658	66.4%
Other	7,812	5,051	64.7%
TOS Code			
All Policy Groups with Less than 30 Claims	541	228	42.1%
CPAP	1,932	1,201	62.2%
Enteral Nutrition	531	316	59.5%
Glucose Monitor	4,836	3,974	82.2%
Hospital Beds/Accessories	505	377	74.7%
Immunosuppressive Drugs	467	274	58.7%
Nebulizers & Related Drugs	2,777	1,691	60.9%
Oxygen Supplies/Equipment	3,484	2,320	66.6%
Wheelchairs Manual	779	621	79.7%
Wheelchairs Options/Accessories	613	462	75.4%
Other	3,950	1,999	50.6%
Resolution Type			

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Automated	2,870	47	1.6%
Complex	20	5	25.0%
None	17,407	13,323	76.5%
Routine	118	88	74.6%
Diagnosis Code			
All Codes With Less Than 30 Claims	814	417	51.2%
Arthropathies and related disorders	610	417	68.4%
Cerebrovascular disease	384	248	64.6%
Chronic obstructive pulmonary disease and allied conditions	5,086	3,268	64.3%
Diseases of other endocrine glands	5,438	4,391	80.7%
Ill-defined and unknown causes of morbidity and mortality	427	282	66.0%
No Matching Diagnosis Code Label	1,871	1,150	61.5%
Other forms of heart disease	530	382	72.1%
Persons with a condition influencing their health status	1,356	640	47.2%
Symptoms	1,095	627	57.3%
Other	2,804	1,641	58.5%

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

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Type Of Bill			
Clinic ESRD	715	119	16.6%
Clinic – Freestanding (Effective April 1, 2010)	636	36	5.7%
Clinical Rural Health	1,721	52	3.0%
Critical Access Hospital	2,756	671	24.3%
Home Health	1,656	154	9.3%
Hospital Other Part B	3,260	1,063	32.6%
Hospital Outpatient	19,931	4,019	20.2%
Nonhospital based hospice	788	23	2.9%
SNF Inpatient	1,055	118	11.2%
SNF Inpatient Part B	521	83	15.9%
Other	1,419	132	9.3%
TOS Code			
Clinic ESRD	715	119	16.6%
Clinic – Freestanding (Effective April 1, 2010)	636	36	5.7%
Clinical Rural Health	1,721	52	3.0%
Critical Access Hospital	2,756	671	24.3%
Home Health	1,656	154	9.3%
Hospital Other Part B	3,260	1,063	32.6%
Hospital Outpatient	19,931	4,019	20.2%
Nonhospital based hospice	788	23	2.9%
SNF Inpatient	1,055	118	11.2%
SNF Inpatient Part B	521	83	15.9%
Other	1,419	132	9.3%

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Diagnosis Code			
Arthropathies and related disorders	1,344	207	15.4%
Diseases of other endocrine glands	1,618	324	20.0%
Dorsopathies	1,013	111	11.0%
Hypertensive disease	1,662	347	20.9%
Nephritis, nephrotic syndrome, and nephrosis	1,054	225	21.3%
Other forms of heart disease	1,749	404	23.1%
Other metabolic disorders and immunity disorders	1,229	358	29.1%
Persons encountering health services for specific procedures and aftercare	3,001	657	21.9%
Persons without reported diagnosis encountered during examination and investigation of individuals and populations	1,537	218	14.2%
Symptoms	3,663	796	21.7%
Other	16,588	2,823	17.0%

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			
All Codes With Less Than 30 Claims	1,829	282	15.4%
Chest Pain (313)	49	15	30.6%
Esophagitis, Gastroent & Misc Digest Disorders W/O Mcc (392)	38	9	23.7%
Heart Failure & Shock W Cc (292)	45	4	8.9%
Heart Failure & Shock W Mcc (291)	54	5	9.3%
Kidney & Urinary Tract Infections W/O Mcc (690)	36	5	13.9%
Legacy DRG Claims	47	0	0.0%
Major Joint Replacement Or Reattachment Of Lower Extremity W/O Mcc (470)	94	20	21.3%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours W Mcc (871)	65	9	13.8%
Syncope & Collapse (312)	38	5	13.2%
Other	158	22	13.9%
TOS Code			
All Codes With Less Than 30 Claims	1,267	211	16.7%
Cardiac Arrhythmia & Conduction Disorders (308 , 309 , 310)	67	6	9.0%
Chronic Obstructive Pulmonary Disease (190 , 191 , 192)	76	3	3.9%
Heart Failure & Shock (291 , 292 , 293)	120	10	8.3%
Intracranial Hemorrhage Or Cerebral Infarction (064 , 065 , 066)	52	2	3.8%
Kidney & Urinary Tract Infections (689 , 690)	59	8	13.6%
Major Joint Replacement Or Reattachment Of Lower Extremity (469 , 470)	103	21	20.4%
Nutritional & Misc Metabolic Disorders (640 , 641)	63	10	15.9%
Septicemia Or Severe Sepsis W/O Mv 96+ Hours (871 , 872)	78	10	12.8%
Simple Pneumonia & Pleurisy (193 , 194 , 195)	71	6	8.5%
Other	497	89	17.9%
Diagnosis Code			

Variable	Number of Claims Reviewed	Number of Claims Containing Errors	Percent of Claims Containing Errors
Arthropathies and related disorders	101	26	25.7%
Cerebrovascular disease	99	6	6.1%
Chronic obstructive pulmonary disease and allied conditions	88	4	4.5%
Complications of surgical and medical care, not elsewhere classified	106	18	17.0%
Ischemic heart disease	161	29	18.0%
Other bacterial diseases	100	12	12.0%
Other diseases of urinary system	81	15	18.5%
Other forms of heart disease	254	43	16.9%
Pneumonia and influenza	96	7	7.3%
Symptoms	153	38	24.8%
Other	1,214	178	14.7%

Table K5 indicates types of claims included or excluded from the determination of each error rate for claim categories including: paid claims, no resolution of claim and provider compliance issues.

Table K5: Included and Excluded in the Sample

Claim Category	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

Tables K6 through K8 indicate the number of claims that CMS included or excluded from the determination of each error rate by claim type: Part B, DME and overall Part A (including Inpatient Hospital PPS).

**Table K6: Frequency of Claims that are Included and Excluded From Each Error Rate:
Part B**

Claim Category	Included	Dropped	Total	Percent Included
Paid	30,965	801	31,766	97.5%
No Resolution	30,968	798	31,766	97.5%
Provider Compliance	30,965	801	31,766	97.5%

**Table K7: Frequency of Claims that are Included and Excluded from Each Error Rate:
DME**

Claim Category	Included	Dropped	Total	Percent Included
Paid	11,996	176	12,172	98.6%
No Resolution	12,006	166	12,172	98.6%
Provider Compliance	11,996	176	12,172	98.6%

**Table K8: Frequency of Claims that are Included and Excluded From Each Error Rate:
Part A including Inpatient Hospital PPS**

Claim Category	Included	Dropped	Total	Percent Included
Paid	36,911	856	37,767	97.7%
No Resolution	36,922	845	37,767	97.8%
Provider Compliance	36,911	856	37,767	97.7%