U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Improper Medicare Fee-for-Service Payments

Fiscal Year 2003

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

PROGRAM INTEGRITY MISSION

The primary objective of program integrity activities at CMS is to insure that the Medicare Fee-for-Service program pays claims correctly. In order to meet this goal, Medicare contractors must insure that they pay the right amount for covered and correctly coded services rendered to eligible beneficiaries by legitimate providers.

CMS CONTACTS

To obtain additional copies of this report, go to www.cms.hhs.gov/cert.

CMS CERT Team Leader: Melanie Combs (CERT@cms.hhs.gov)

CMS Public Affairs Contact: Peter Ashkenaz (pashkenaz@cms.hhs.gov)

EXECUTIVE SUMMARY

Background

This fiscal year (FY) 2003 Improper Medicare Fee-For-Service (FFS) Payments Report is the first CMS has produced. CMS has established two programs to monitor the accuracy of Medicare FFS: The Comprehensive Error Rate Testing (CERT) program and the Hospital Payment Monitoring Program (HPMP). The error rate is a product of error rates the CERT contractor and HPMP calculated; each component represents 50 percent of the error rate. The CERT contractor calculates the error rate for Carriers, Durable Medical Equipment Regional Carriers (DMERCs), and Fiscal Intermediaries (FIs), and HPMP calculates the error rate for the Quality Improvement Organizations (QIOs).

Strong outcome-oriented performance measures are a good way to assess the degree to which a government program is accomplishing its mission and to identify improvement opportunities. The Improper Medicare FFS Payments Report describes the performance measurement program for the FFS Medicare Program.

The Department of Health and Human Services, Office of the Inspector General (OIG) produced Medicare FFS error rates from 1996 - 2002. The OIG designed a sampling method that estimated only a national FFS paid claims error rate (the percentage of dollars that Carriers/DMERCs/FIs/QIOs erroneously allowed). However, in order to better measure the performance of the Carriers, DMERCs, and FIs and in order to gain insight into the causes of errors, CMS elected to calculate a provider compliance error rate (which measures how well providers prepared claims for submission) and a services processed error rate (which measures whether the Carrier/DMERC/FI made appropriate payment decisions on claims) in addition to the national paid claims error rate.

CMS calculates the Medicare Fee-For-Service error rate and estimate of improper claim payments using a methodology the OIG approved. The methodology includes:

- Randomly selecting a sample of approximately 128,000 claims submitted in calendar year (CY) 2002;
- Requesting medical records from providers who submitted the claims;
- Reviewing the claims and medical records to see if the claims complied with the Medicare coverage, coding, and billing rules; and
- When providers failed to submit the requested documentation, treating the claims as errors and sending the providers overpayment letters.

Summary of Findings

As a result of CERT and for the first time, CMS will have information at a sufficiently detailed level so that problems can be better assessed and corrected. The error rate may now be viewed at a contractor specific and a provider specific level, enhancing CMS's ability to oversee and manage Medicare payments.

Our review showed that 5.8 percent[1] of the dollars paid did not comply with Medicare rules; this totaled $11.6 billion[2]. The paid claims error rate for Carriers was 14.4 percent; for DMERCs, 13.6 percent; for FIs, 14.4 percent; and for QIOs[3], 3.5 percent.

The report lists the paid claims error rate by service type for Carriers, FIs and DMERCs. The highest rates by contractor type are as follows:

- For claims submitted to carriers, hospital visits subsequent to initial visits had the highest error rate at 35.8 percent ($1.8 billion)
- For claims submitted to DMERCs, surgical dressings had the highest error rate at 40.0 percent ($23.3 million)
- For claims submitted to FIs, non-PPS hospital in-patient claims had the highest error rate at 53.0 percent ($901.7 million)

In addition, the report lists error rates by provider type, which shows that the providers with the highest provider compliance error rate include chiropractors (30.6%) and physical therapists (29.4%).

Corrective Actions

CMS and its contractors are engaging in multiple corrective action initiatives to reduce the non-response problem, including:

1. CMS revised the letters requesting medical records by clarifying the role of the CERT contractor and explaining that it is not a violation of the Health Insurance Portability and Accountability Act (HIPAA) privacy rules to submit records to the CERT contractor. The new letter includes a fax number to make it easier for providers to submit medical records to the CERT contractor by fax.
2. Carriers/DMERCs/FIs have been educating providers about the CERT contractor so that providers are not hesitant to send requested medical records.

---

[1] This is an adjusted figure of the national paid claims error rate to account for the high provider non-response experienced in 2003. Had the adjustment not been made, the national paid claims error rate would have been 9.8 percent.

[2] This is an adjusted figure of the national projected dollars paid in error to account for the high provider non-response experienced in 2003. Had the adjustment not been made, the national projected dollars paid in error would have been $19.6 billion.

[3] (a) For 2003, FIs only have a paid claims error rate. The other rates will be available in 2004 and 2005. (b) The QIOs only calculated a paid claims error rate. (c) The QIO figures are net of co-payments, deductibles, and payment reductions carriers/DMERCs/ FIs made to recover previous overpayments.

3. CMS now requires the CERT contractor to perform a more intense follow-up process for contacting providers who fail to respond to CERT requests, including multiple letters, phone calls, and faxes.
4. The CERT contractor will develop a mechanism to allow Carriers/DMERCs/FIs to see which providers have not responded to CERT documentation requests. Carriers/DMERCs/FIs can then assist in the process of contacting non-responding providers to encourage them to respond.
5. CMS has requested funding to support an Electronic Medical Record (EMR) Submission Pilot to facilitate the process and timeliness of submitting medical records.

In addition to corrective actions to lower the non-response rate, the following are some other corrective actions underway:

1. CMS will increase and refine one-on-one educational contacts with providers found to be billing in error.
2. CMS will make it easier for providers to find the Medicare rules by developing a centralized database of national coverage, coding, and billing articles.
3. CMS will develop and install new Correct Coding Initiative edits.
4. CMS will develop procedure code modifiers to allow chiropractors to better distinguish between covered care and non-covered care.
5. CMS will develop a tool that generates state-specific hospital billing reports to help QIOs analyze administrative claims data.

CMS remains vigilant in monitoring the error rate and developing appropriate corrective action plans designed to achieve our goals. We are confident that implementation of our corrective actions will help us to reduce the error rate in the coming years.

TABLE OF CONTENTS

Appendices

OVERVIEW

Background

The Medicare program was established by the Social Security Act in 1965. Medicare currently covers health care needs of people aged 65 and over, the disabled, people with End Stage Renal Disease (ESRD), and certain others who elect to purchase Medicare coverage. Both Medicare costs and the number of Medicare beneficiaries have increased dramatically since 1965. In FY 2003, more than 40 million beneficiaries were enrolled in the program and the total Medicare expenditure (both FFS and managed care payments) was estimated at about $257 billion.[4] CMS projects that total expenditures for the Medicare program will exceed $400 billion by 2010.

CMS uses several types of contractors to ensure the accurate coding and coverage of Medicare claims and admissions. The contractors include Carriers/DMERCs/FIs/QIOs.

The primary goal of each Carrier, DMERC, and FI is to "Pay it Right" – that is, to pay the right amount to the right provider for covered and correctly coded services. Budget constraints limit the number of claim reviews these contractors can conduct, thus they must choose carefully which claims to review. To improve provider compliance, Carriers/DMERCs/FIs must also determine how best to educate providers about the Medicare rules and implement the most effective methods for fully and accurately answering coverage and coding questions.

History of Error Rate Production

Prior to 2003, the OIG estimated the Medicare FFS error rate. The OIG produced Medicare FFS error rates from 1996 - 2002. The OIG's sampling method was designed to estimate only a national FFS paid claims error rate. Due to the sample size, approximately 6,000 claims, the OIG was unable to produce error rates by type of service, type of provider, type of contractor, and contractor-specific error rates.

Following recommendations from the OIG and using their methodology, CMS refined the methodology and increased the sample size to 128,342 claims in developing the FY 2003 Medicare FFS error rates. The 2003 Improper Medicare FFS Payments Report is the first time CMS produced error rates by type of service, type of provider and for each contractor. A summary of the

[4] 2002 CMS Statistics: U.S. Department of Health and Human Services; CMS Pub. No. 03437, April 2002.

differences between the OIG methodology and the CMS methodology can be found in Appendix D.

Types of Error Rates Produced

In order to better measure the performance of the Carriers, DMERCs, and FIs, and in order to gain insight into the causes of errors, CMS decided not only to calculate a national Medicare FFS paid claims error rate but two additional error rates—the provider compliance error rate and a services processed error rate. Descriptions of all three types of error rates are listed below. See Appendix C for further detail.

Paid Claims Error Rate

This rate is based on dollars paid after the Carrier/DMERC/FI/QIO made its payment decision on the claim/admission. It excludes any claim/admission that the Carrier/DMERC/FI/QIO completely disallowed (CMS has reviewed the impact of these exclusions and determined that they have a negligible effect on the error rate.). The paid claims error rate is the percentage of dollars that Carriers/DMERCs/FIs/QIOs erroneously allowed to be paid and is a good indicator of how claim errors in the Medicare FFS program impact the trust fund. This error rate is based on dollars.

Provider Compliance Error Rate (new for 2003)

This rate is based on how the claims looked when they first arrived at the Carrier/DMERC/FI – before the Carrier/DMERC/FI applied any edits or conducted any reviews. The provider compliance rate is a good indicator of how well the Carrier/DMERC/FI is educating the provider community because it measures how well providers prepared claims for submission. This error rate is based on dollars.

Services Processed Error Rate (new for 2003)

This rate is based on services processed and measures whether the Carrier/DMERC/FI made appropriate payment decisions on claims. All sampled claims are included (whether the Carrier/DMERC/FI paid or denied them). This is a gross rate where the number of services overpaid is added to the number of services underpaid. The services processed error rate is a good indicator of how well the Carrier/DMERC/FI is doing overall at finding and preventing claim errors. This error rate is based on numbers of services.

The rates in this report were developed using claims:

1) that were submitted during the time periods shown in Table 1;

2) for which documentation was received and reviewed prior to the cut off date (July 31, 2003) or where the 55-day waiting period for documentation was reached prior to the cut off date; and

3) where feedback from the Carrier/DMERC/FI was received and processed prior to August 28, 2003.

Table 1: Reporting Periods

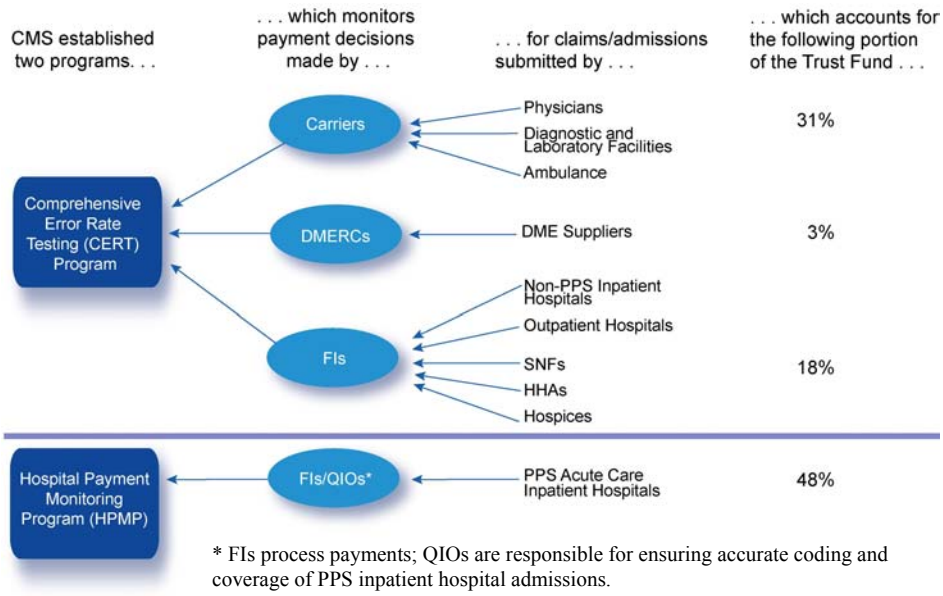
Carriers:	Claims submitted between 01/01/02 – 12/31/02
DMERCs:	Claims submitted between 01/01/02 – 12/31/02
FIs:	Claims submitted between 06/01/02 – 12/31/02
QIOs:	Discharges occurring between 04/01/01 – 03/31/02

Although the reporting periods are not the same for all contractor types, it is methodologically acceptable to combine error rates for contractor types to estimate the Medicare FFS paid claims error rate because error rates are constant over time. Beginning with the FY 2004 report, the reporting periods for all four contractor types will be the same.

Two Measurement Programs: CERT and HPMP

CMS has established two programs to monitor the accuracy of Medicare FFS: **The Comprehensive Error Rate Testing (CERT)** program and the **Hospital Payment Monitoring Program (HPMP)**. The main objective of the CERT program and HPMP is to measure the degree to which CMS and its contractors are meeting the goal of "Paying it Right." The HPMP monitors PPS inpatient admissions only. The CERT program monitors all other claims. Each program comprises approximately 50 percent of the error rate. Figure 1 depicts the types of claims/admissions involved in each monitoring program.

Figure 1: CMS' Process for Monitoring the Accuracy of Medicare Payments



* FIs process payments; QIOs are responsible for ensuring accurate coding and coverage of PPS inpatient hospital admissions.

While both the CERT program and HPMP produce a paid claims error rate, the CERT program produces a number of additional rates. Table 2 summarizes the error rates presented in this report.

Table 2: Error Rates Available in this Report *

Monitoring Program	Type of Error Rate(s) Produced	Paid Claims Error Rate	Provider Compliance Error Rate	Services Processed Error Rate	Refer to Page
CERT + HPMP	Medicare	✓		Not Produced	11
CERT	For all Carriers (as a group)	✓	✓	✓	
	For all DMERCs (as a group)	✓	✓	✓	
	For all FIs (as a group)	✓	Available in 2005	Available in 2005	19
	For each individual Carrier	✓	✓	✓	
	For each individual DMERC	✓	✓	✓	
	For each individual FI	Available in 2004	Available in 2005	Available in 2005	N/A
	By type of service	✓	Not Produced	Not Produced	21
	By type of provider	✓	✓	✓	
HPMP	For all QIOs (as a group)	✓	Not Produced	Not Produced	20
	For each individual QIO	✓	Not Produced	Not Produced	20
	By type of service	✓ **	Not Produced	Not Produced	N/A

*All CERT data in this report is based on documentation received from providers through July 31, 2003. These rates do not reflect any documentation the CERT contractor received from providers after July 31, 2003. In addition, these rates do not reflect any feedback the CERT contractor received from the Carriers/DMERCs/FIs after August 28, 2003.

** HPMP produced an error rate for only one type of service – PPS inpatient hospital.

The national Medicare FFS paid claims error rate and the Carrier-specific, DMERC-specific, and FI error rates will be updated on a quarterly basis, beginning January 2004, to incorporate the review results from providers who submit late documentation to the CERT contractor (i.e., after July 31, 2003) and feedback results from Carriers/DMERCs/FIs received after August 28, 2003. Although CMS will not amend this written report, the most up-to-date rates will be available at www.cms.hhs.gov/cert. The following table summarizes the update schedule.

Table 3: Update Schedule for National Medicare FFS Paid Claims Error Rate and Carrier-specific, DMERC-specific, and FI Error Rates

Date Quarterly Update will be Posted	Including Late Documentation Received From Providers Through the Following Dates	Including Feedback Received from Carriers/DMERCs/FIs Received Through the Following Dates
January 1, 2004	September 30, 2003	November 5, 2003
April 1, 2004	December 31, 2004	February 6, 2004
July 1, 2004	March 31, 2004	May 6, 2004
October 1, 2004	June 30, 2004	August 6, 2004

OVERVIEW OF METHODOLOGY AND PROCEDURES

CERT

Sampling

For this report, the CERT program randomly sampled 70,567[5] claims from Carrier groups, DMERCs, and FI groups[6]. The CERT contractor randomly selected about 200 claims monthly from each Carrier, DMERC, and FI. This process was designed to pull a blind, electronic sample of claims each day, from all of the claims submitted that day.

For the FY 2003 Report, the CERT program randomly sampled 70,567 claims from Carriers, DMERCs, and FIs.

If a Carrier/DMERC/FI performed complex medical review on a sampled claim (i.e., requested and received a medical record from the provider who submitted the claim), the CERT contractor requested the medical record for the claim from the Carrier/DMERC/FI. Otherwise, the CERT contractor requested the medical record from the provider. The initial request for medical records was sent via letter. If the provider failed to respond to the initial request after 19 days, three subsequent letters were sent.

In cases where the CERT contractor received no documentation from the provider once 55 days had passed since the initial request, the CERT contractor considered the case a non-response claim and counted it as an error. The CERT contractor considered any documentation received after the 55th day "late documentation." If the CERT contractor received late documentation prior to the cut-off date for this report (July 31, 2003), they reviewed the records, and if justified, revised the error in each rate throughout the report. If the CERT contractor received late documentation after the cut-off date for this report, they counted the case as an error. However, the CERT contractor will review the records, and if justified, will recalculate the national paid claims error rate and the Carrier/DMERC/FI-specific rates in the updated rate tables on www.cms.hhs.gov/cert in January, April, July, and October of 2004.

Further details about CERT procedures can be found in Appendix C.

[5]Since the transition of the FIs had not been completedwhen the reporting period began, only seven months of FI claims in the sample. Thus, for the FY 2003 report, CERT sampled only 70,567 claims. Beginning with the FY 2004 report, the CERT program will sample approximately 120,000 claims per year.

[6] Throughout the remainder of this document, we will refer to Carrier groups and FI groups as Carriers and FIs. The contractors in each group are identified in Appendix G.

Review of Claims

Upon receipt of a medical record, the CERT contractor's clinicians conducted a review of the claim and submitted documentation. They followed Medicare regulations, national coverage decisions, coverage provisions in interpretive manuals, and the respective Carrier's, DMERC's, or FI's Local Medical Review Policies (LMRPs) and articles.

Hospital Payment Monitoring Program (HPMP)

Sampling

Each month, CMS contractors selected data from a clinical data warehouse that mirrors the National Claims History (NCH) database that CMS maintains and provided the data to the Clinical Data Abstraction Centers (CDACs). The database contained an extract of all records CMS had paid. All claims data needed for the HPMP were included in the records selected for the sample.

For the FY 2003 report, the HPMP randomly sampled 57,775 discharges from PPS inpatient hospitals.

The sample was drawn from 52 states and jurisdictions (the Virgin Islands were excluded). For this report, the HPMP randomly sampled 57,775 discharges. Final action, paid claims were selected four months after the month of discharge using a pure random sampling methodology.

Further details about the HPMP sampling procedures can be found in Appendix E.

Review of Claims

The CDACs performed record abstraction and initial screening review. CDACs completed screening review using existing information. CDACs did not follow-up with providers; the follow-up was done by the QIOs.

The CDACs extracted specific data elements from each medical record received. Next, the CDACs screened the records for admission necessity and DRG coding. Additionally, the CDACs reviewed Maryland records for length of stay (Maryland is the only waivered non-PPS state).

Screening involved a detailed examination of each individual's medical record for a specific hospitalization, treatment, etc. The primary types of screening pertinent to payment error include medical necessity review (hospital admissions) and DRG validation. The CDAC nurse reviewers used specific modules of the InterQual criteria to screen for admission necessity. Qualified coding specialists performed

DRG coding validation screening. Records failing screening and records not received in a timely manner were referred to the responsible QIO for case review.

The HPMP relied on the QIOs to review medical records to determine if claims were paid in error. By statute, only the QIOs can perform this task.

Weighting and Determining the Final Results

The error rates were weighted such that each Carrier/DMERC/FI/QIO's contribution to the error rate was proportional to their size (as measured by percent of claims for which they were responsible). See Appendix C for further details. This report uses two methods to express error rates in this report: a single error rate and a confidence interval. The single rate is a best estimate of what the rate actually is; it is also the simplest way to talk about a rate. The confidence interval is an expression of how certain CMS is that the estimate is correct.

Adjustments to the National Paid Claims Error Rates

In order to adjust the Medicare FFS paid claims error rate, the CERT contractor substituted the average OIG error rate due to non-response, 1.08 percentage points, for the CERT 2003 portion of the error rate due to non-response, 5.36 percentage points. Then, they took the difference between the two (5.36%-1.08%=4.28%). The CERT contractor assumed that the difference consisted of two components: claims in error and claims not in error. They estimated the portion of claims in error based on the 2003 CERT error rate excluding non-response errors. The CERT contractor then distributed those errors to the other error categories (insufficient documentation, medical necessity, etc.) in proportion to the average frequencies observed by the OIG studies between 1996 and 2202. This resulted in an adjusted CERT error rate of 5.84%. See Appendix C for details.

Outcome of Sampled Claims

When the CERT contractor detected an overpayment, they notified the Carrier/DMERC/FI that recouped the overpayment amount from the provider following normal overpayment collection rules. Providers can appeal any denial following normal appeal processes. However, appeal determinations that reversed the CERT contractor's decision were not backed out of the CERT contractor's database. They continued to be counted as errors.

When the CERT contractor detected an underpayment (i.e., the provider billed a lower code than what was documented in the medical records and needed by the

beneficiary or the Carrier/DMERC/FI made an incorrect full or partial denial), they notified the Carrier/DMERC/FI. CMS will instruct the Carriers, DMERCs, and FIs to make payment to providers in these cases.
When the HPMP detected an overpayment or under payment, an adjustment for the claim was sent to the appropriate FI.

CMS' Error Rate Goals

GPRA Goals

Under the Government Performance and Results Act (GPRA), CMS aims to accomplish three goals that involve error rates by 2008.

CMS aims to reduce the National Medicare FFS paid claims error rate to 4 percent by 2008.

1. **Reduce the National Medicare FFS Paid Claims Error Rate**
   By 2008, reduce the percent of improper payments under Medicare FFS to 4 percent.

2. **Reduce the Contractor-specific Paid Claims Error Rate**
   By 2008, each Medicare Carrier, DMERC, and FI will have an error rate no more than 1 percent above the actual unadjusted national paid claims error rate for 2008.

3. **Improve the Provider Compliance Error Rate**
   By 2008, CMS will significantly improve the Provider Compliance Error Rate, based on the 2003 baseline.

How CMS Will Use the Rates

CMS will use the error rate findings described in this report to determine underlying reasons for claim errors and to develop appropriate action plans to improve compliance in payment, claims processing, and provider billing practices. The tracking and reporting of error rates can help CMS identify emerging trends and implement immediate corrective actions to manage Medicare contractor performance accurately. See pages 30-34 for a full description of the 2003 corrective actions CMS is undertaking.

FINDINGS

The National Medicare FFS Paid Claims Error Rate

The national paid claims error rate in the Medicare FFS program for 2003 is 9.8 percent[7]. This means that of the $200 billion the Medicare FFS program paid during the timeframe studied, the program paid $19.6 billion[8] incorrectly.

Figure 2: National Medicare FFS Paid Claims Error Rate (1996 – 2003)

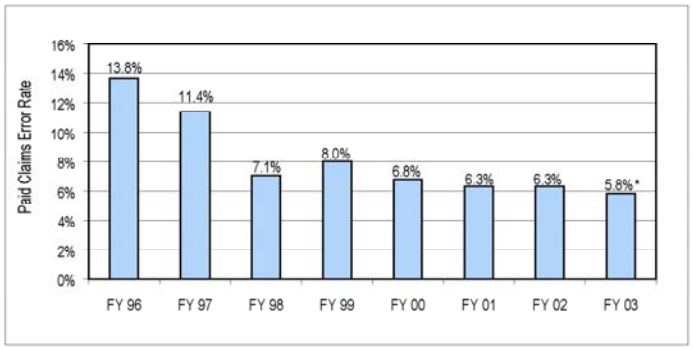
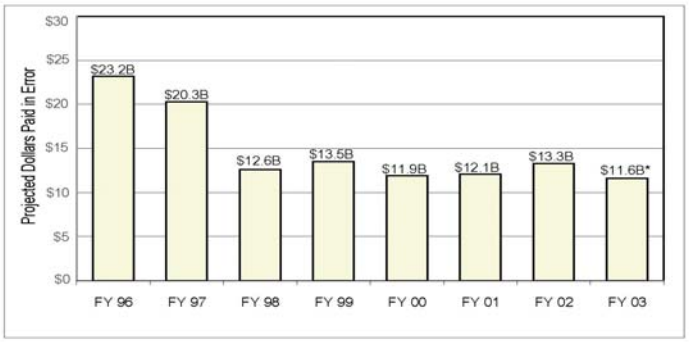


Figure 3: National Projected Dollars Paid in Error (1996 – 2003)



* These figures have been adjusted to account for the high provider non-response experienced in 2003. Had the adjustment not been made, the national paid claims error rate would have been 9.8% and the projected dollars paid in error would have been $19.6B.

[7] This is a an adjusted figure of the national paid clams error rate to account for the high provider non-response experienced in 2003. Had the adjustment not been made, the national paid claims error rate would have been 9.8 percent.

[8] The $19.6 billion is a net figure--underpayments ($0.95B) are subtracted from overpayments ($20.55B). We estimate the gross improper payment amount (where underpayments are added to overpayments) in the Medicare FFS FY 2003 report to be $ 21.5 billion. Fully denied claims (claims for which the Medicare contractor made no payment) were excluded from the calculation of the paid claims error rate because the results of the review of fully denied claims make a negligible contribution to the error rate. Including reversals of Medicare contractor decisions for fully denied claims would increase the error rate less than 0.2 percent.

Paid Claims Error Rates By Error Type

Table 4 summarizes the percent of each year's national paid claims errors attributable to various categories.[9]

Table 4: Percentage and Dollar Value of Error by Category (Dollars in Billions)

Type of Error	1996	1997	1998	1999	2000	2001	2002	2003*
Non-Response	14.0%	18.7%	5.6%	7.3%	17.2%	12.4%	8.5%	18.5%
Insufficient Documentation	32.8%	25.6%	11.2%	33.1%	19.2%	30.5%	20.1%	45.0%
Medically Unnecessary Services	36.8%	36.9%	55.6%	32.8%	43.0%	43.2%	57.1%	21.7%
Incorrect Coding	8.5%	14.7%	18.0%	15.8%	14.7%	17.0%	14.3%	12.1%
Other	7.9%	4.1%	9.6%	11.0%	5.9%	(3.1%)	0.0%	2.7%
Total (%)	100%	100%	100%	100%	100%	100%	100%	100%

*These figures have been adjusted to account for the high provider non-response experienced in 2003. Had the adjustments not been made, 54.7% of the 9.8% paid claims error rate would have been due to non-response, 25.9% due to insufficient documentation, 11.3% due to medically unnecessary services, 6.7% due to incorrect coding, and 1.4% due to other errors.

Non-Response Errors

"Non-Response" means the provider did not submit any documentation[10] to support the services provided. Non-response was attributed to multiple factors, including provider lack of familiarity with the CERT contractor (as compared to the OIG), concerns about compliance with HIPAA; and cases where documentation did not exist. The portion of the national paid claims error rate due to providers' failure to respond to the CERT contractor's or CDAC's requests for medical records was 18.5 percent.

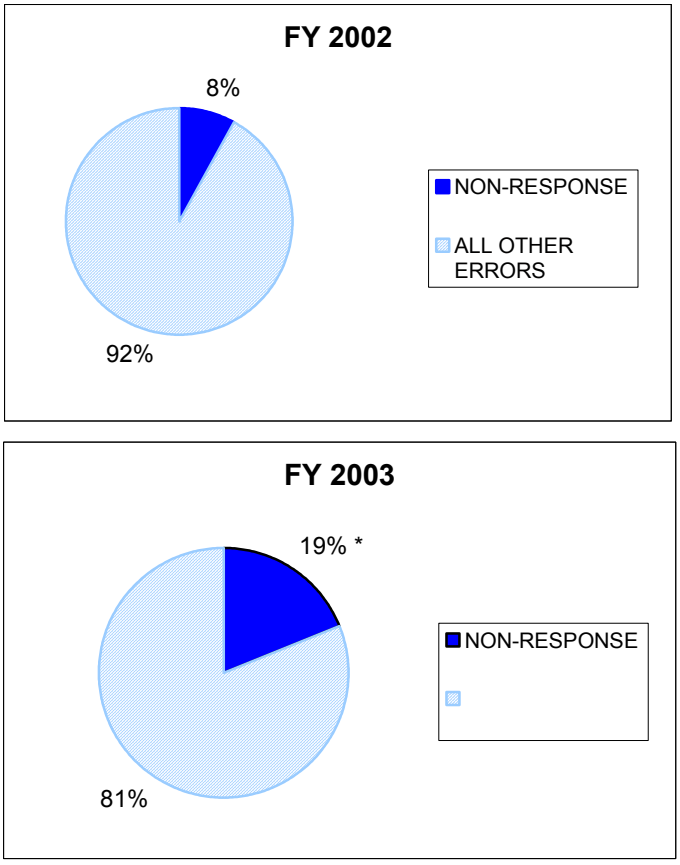
[9] Estimates of the total dollar value of errors and the dollar value of payments for 2003, below the subnational level, are reported gross of copays and deductibles. Thus, the percentage of errors by type reported in 2003 in Table 4 are comparable to the percentage of errors by type reported earlier. However, the dollar value of errors in 2003 are gross of copays and deductibles, while those reported earlier are net of copays and deductibles. In subsequent tables, dollars in error and payments for 2003 are reported gross of copays and deductibles.

[10] HPMP non-response errors includes both non-response and insufficient documentation. CERT non-response errors only include non-response. CERT non-response errors are comprised of instances where the CERT contractor received no documentation from the provider. Receipt of no documentation includes no response from the provider as well as the following responses: provider could not find record, record destroyed, provider did not treat beneficiary, provider believes releasing the record is a HIPAA privacy violation, and the cost of providing the record is too great.

The following is an example of non-response:

> *Physician.* A Carrier paid $91.89 for an office visit and services. After repeated attempts from the CERT contractor to obtain the supporting medical records from the provider, the medical reviewer was informed that the records could not be located. As a result, the entire payment was denied.

Figure 4: Proportion of Paid Claims Error Rate Due to Providers' Non-Response



*This figure has been adjusted to account for the high provider non-response experienced in 2003. Had the adjustment not been made the portion of the paid claims error rate due to provider's non-response would have been 55%.

Insufficient Documentation Errors

"Insufficient documentation" means that the provider did not capture pertinent patient facts (i.e., the patient's overall condition, diagnosis, and extent of services performed) in the medical record information submitted.

In several cases of "insufficient documentation," it was clear that Medicare beneficiaries received services, but the physician's orders or documentation supporting the beneficiary's medical condition were incomplete. While these errant claims did not meet Medicare reimbursement rules regarding

documentation, one cannot conclude that the services were not provided. However, cases with insufficient documentation were counted as errors. Insufficient documentation accounted for 45.0 percent of the national paid claims error rate.

The following is an example of an insufficient documentation error:

> *Outpatient.* An FI paid an outpatient hospital $96.00 for a clinic visit. The documentation did not include a doctor's order, a medical history, or notes to support the diagnosis listed on the claim form. As a result, the CERT contractor denied the entire payment.

Medically Unnecessary Service Errors

"Medically unnecessary services" covers situations in which the medical review staff identified enough documentation in the medical record to make an informed decision that the services billed to Medicare were not medically necessary. For PPS inpatient hospitals, medical necessity means that the admission was necessary and the setting was appropriate. Providers' performing medically unnecessary services accounted for 21.7 percent of the national paid claims error rate.

The following is an example of a medically unnecessary service:

> *Skilled nursing facility.* An FI paid a skilled nursing facility $49.22 for 30 minutes of therapeutic procedures; however, the certification by the physician for the services did not cover the dates for which the services were billed. As a result, the reviewer determined that the services were not medically necessary and, consequently, the claim was denied.

Coding Errors

Providers use a standard coding system to bill Medicare. 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 "up coded" claims). However, for some of the coding errors, the medical reviewers determined that the documentation supported a higher code than the code the provider submitted (in these cases, the providers are said to have "under coded" claims). Under coded claims were rated against up coded claims. Providers incorrectly coding claims accounted for 12.1 percent of the national paid claims error rate.

The following is an example of a coding error:

> *Physician.* A Carrier paid a physician $135.42 for the evaluation and management of an established patient. This procedure requires at least two of three key components: a detailed history, a detailed examination, and/or

medical decision-making of moderate complexity. The medical reviewer determined that the services did not meet the minimum criteria for these key components because a licensed nurse rendered the services. Instead, the criteria for a limited service were met. The CERT reviewer determined that the service should have been billed at a lower code and denied $43.83 of the payment.

Other Errors

"Other" errors include instances when providers' claims did not meet benefit category requirements or other billing requirements. Errors for services not meeting the benefit category requirements were more common among claims submitted to DMERCs than claims submitted to Carriers or FIs. The absence of a valid physician's order made some DME items non-covered because an order or Certificate of Medical Necessity (CMN) was required to meet the benefit category requirements for the DME item. The category "Other" errors accounted for 2.7 percent of the national paid claims error rate.

According to the *Medicare Handbook*, Medicare Part B does not cover the following services:

- Most routine physical examinations and tests directly related to such examinations;
- Eye and ear examinations to prescribe or to fit glasses or hearing aids;
- Most prescription drugs;
- Most routine foot care; and
- Chiropractic services, unless the services are for the manipulation of the spine to correct a subluxation demonstrated by x-ray or by physical examination.

The following is an example of an "other" error:

DME. A DMERC paid $76.64 for a DME item but the physician order was not signed or dated as required by the DME item's benefit category rules. Therefore, the CERT contractor denied payment in full.

Paid Claims Error Rates By Type of Contractor[11]

From this point forward, we have not made the adjustment for the non-response rate. As illustrated in Figure 5, the estimated paid claims error rate for FY 2003 was 14.4 percent for Carriers and 13.6 percent for DMERCs. FIs had a paid claims error rate of 14.4 percent, while QIOs had a rate of 3.5 percent. Figure 5 demonstrates the paid claims error rates by contractor type for FY 2003. As illustrated in Figure 6, the estimated improper payments made in FY 2003 were $10.5 billion for Carriers and $1.3 billion for DMERCs. FIs paid an estimated $8.1 billion in improper payments, while QIOs allowed $2.8 billion[3] in improper payments.

Figure 5: Paid Claims Error Rates By Contractor Type – FY 2003

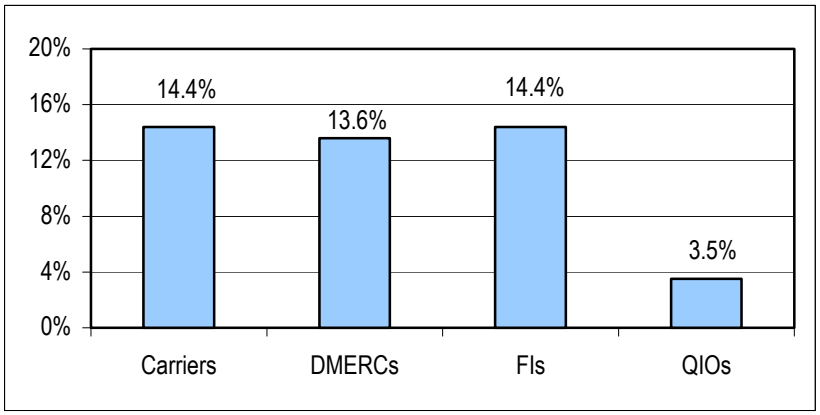
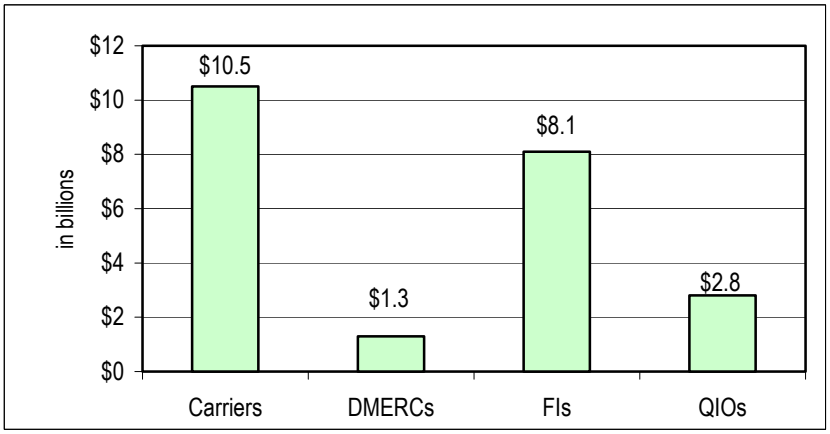


Figure 6: Projected Dollars Paid in Error By Contractor Type – FY 2003



[11] We have not adjusted these figures for high non-response. In addition, estimates of the total dollar value of errors and the dollar value of payments for 2003, below the subnational level, are reported gross of copays, deductibles, and reductions to recover previous overpayments. Thus, the percentage of errors by type reported in 2003 in Table 4 are comparable to the percentage of errors by type reported earlier. However, the dollar value of errors in 2003 are gross of copays, deductibles, and reductions to recover previous overpayments, while those reported earlier are net of copays, deductibles, and reductions to recover previous overpayments. In subsequent tables, dollars in error and payments for 2003 are reported gross of copays, deductibles, and reductions to recover previous overpayments.

The Carrier-Specific Error Rates[11]

Table 5: Carrier-Specific Paid/Allowed Claims Error Rate, Provider Compliance Error Rate, and Services Processed Error Rate

	Paid/Allowed Claims Error Rate					Provider Compliance Error Rate		Services Processed Error Rate	
	Including Non-Response Claims	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims
SSS PR/VI	25.7%	$192,441,738	3.1%	19.56% - 31.85%	10.9%	26.7%	12.2%	28.7%	16.8%
Empire NY/NJ	20.7%	$1,476,718,878	2.2%	16.43% - 24.86%	11.6%	27.4%	19.8%	21.3%	12.2%
GHI NY	19.7%	$69,197,215	1.6%	16.64% - 22.73%	9.6%	22.6%	13.2%	21.5%	13.1%
NHIC CA	17.0%	$1,179,891,675	1.6%	13.97% - 20.12%	8.1%	24.6%	17.2%	19.5%	10.9%
First Coast FL	16.9%	$944,947,195	2.0%	13.06% - 20.70%	7.2%	24.8%	16.7%	18.8%	10.7%
BCBS AR NM/OK/LA	16.6%	$374,845,747	1.5%	13.65% - 19.54%	7.8%	23.3%	15.9%	17.2%	11.0%
Trailblazer TX	16.5%	$827,281,077	1.5%	13.60% - 19.46%	7.5%	25.9%	18.8%	19.5%	10.5%
Trailblazer MD/DC/DE/VA	14.8%	$438,049,609	1.6%	11.59% - 17.99%	6.4%	25.5%	19.2%	22.2%	17.0%
	Average = 14.4%								
WPS WI/IL/MI/MN	13.9%	$1,103,130,474	1.5%	10.98% - 16.86%	6.8%	22.7%	17.0%	16.9%	11.7%
Highmark PA	13.8%	$481,277,559	1.4%	11.03% - 16.48%	6.3%	22.4%	16.3%	15.8%	9.0%
BCBS RI	13.7%	$21,551,150	2.0%	9.70% - 17.72%	10.1%	28.5%	25.8%	24.0%	20.8%
BCBS AR AR/MO	13.4%	$242,429,237	1.7%	10.06% - 16.70%	7.4%	16.9%	11.4%	15.2%	10.3%
Cahaba AL/GA/MS	13.3%	$851,832,114	1.2%	11.08% - 15.61%	6.9%	20.7%	15.2%	14.6%	9.8%
BCBS UT	12.1%	$40,180,900	1.5%	9.17% - 15.11%	6.0%	20.6%	15.4%	13.7%	9.1%
NHIC MA/ME/NH/VT	12.0%	$274,866,141	1.0%	10.03% - 13.87%	6.2%	19.2%	14.3%	15.2%	9.1%
Palmetto OH/WV	11.8%	$364,420,753	1.2%	9.45% - 14.04%	6.8%	18.0%	13.7%	14.6%	9.5%
Palmetto SC	11.7%	$139,662,093	1.3%	9.16% - 14.21%	7.0%	13.7%	9.3%	14.6%	10.6%
CIGNA ID/TN/NC	11.3%	$449,175,393	1.2%	9.03% - 13.53%	7.6%	14.2%	10.7%	15.2%	11.2%
HealthNow NY	11.0%	$146,875,346	1.2%	8.72% - 13.27%	5.5%	15.4%	10.4%	16.0%	9.3%
BCBS KS KS/NE/Kansas City	9.7%	$130,653,437	0.9%	7.95% - 11.39%	6.4%	11.9%	8.8%	11.5%	8.9%
Noridian AZ/HI/NV/AK/OR/WA	9.3%	$327,525,111	0.9%	7.47% - 11.03%	5.1%	16.3%	12.8%	12.3%	7.9%
Noridian CO/ND/SD/WY/IA	8.9%	$153,142,352	1.0%	6.93% - 10.95%	4.7%	18.3%	14.9%	10.7%	6.9%
AdminaStar IN/KY	8.9%	$245,659,576	1.0%	7.08% - 10.80%	6.3%	10.1%	7.6%	10.7%	8.4%
First Coast CT	7.4%	$48,654,535	1.2%	5.15% - 9.65%	5.1%	24.3%	20.7%	37.3%	35.8%
BCBS MT	6.1%	$12,816,069	0.9%	4.41% - 7.86%	4.2%	11.5%	9.9%	11.0%	9.1%
All Carriers	**14.4%**	**$10,537,225,375**	**0.4%**	**13.60% - 15.18%**	**7.3%**	**21.5%**	**15.5%**	**17.2%**	**11.0%**

The DMERC-Specific Error Rates[11]

Table 6: DMERC-Specific Paid/Allowed Claims Error Rate, Provider Compliance Error Rate, and Services Processed Error Rate

	Paid/Allowed Claims Error Rate					Provider Compliance Error Rate		Services Processed Error Rate	
	Including Non-Response Claims	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims
Palmetto - Region C	17.8%	$811,712,621	2.4%	12.99% - 22.55%	11.48%	21.2%	15.4%	15.9%	11.8%
	Average = 13.6%								
CIGNA - Region D	11.8%	$204,392,695	1.7%	8.50% - 15.17%	8.76%	13.1%	10.2%	13.7%	11.9%
Tricenturion - Region A[12]	10.5%	$133,519,710	1.4%	7.83% - 13.12%	6.92%	11.5%	8.1%	12.9%	10.1%
AdminaStar Federal - Region B	7.3%	$139,307,982	0.9%	5.61% - 9.01%	5.73%	8.0%	6.5%	9.7%	8.1%
All DMERCs	**13.6%**	**$1,288,933,007**	**1.2%**	**11.17% - 16.04%**	**9.16%**	**15.9%**	**11.7%**	**13.7%**	**10.7%**

[12] PSCs are special contractors that CMS has hired to work with Carriers and FIs to help reduce fraud and abuse. In most cases, PSCs were responsible only for potential fraud detection and prevention. In a few cases, PSCs also perform postpayment medical review work. In each of these cases, the primary responsibility for lowering the improper payments rests with the Carrier or FI. However, one PSC – the DMERC PSC, Tricenturion – is responsible for all anti-fraud and medical review work in a single DMERC region. As such, it was Tricenturion (the PSC) not HealthNow (the regular DMERC) that was responsible for lowering the error rates in this region.

The FI Error Rates[11]

Since FIs were the last type of contractor to transition into the CERT program, FI-specific error rates are not available at this time. CMS anticipates that the FY 2004 Improper Medicare FFS Payments Report will contain FI-specific rates.

Table 7: All FI Paid/Allowed Claims Error Rate

	Paid/Allowed Claims Error Rate					Provider Compliance Error Rate		Services Processed Error Rate	
	Including Non-Response Claims	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims
All FIs	14.4%	$8,104,395,711	1.1%	12.15% - 16.63%	3.9%	N/A	N/A	N/A	N/A

The QIO-Specific Error Rates[3]

Table 8: QIO-Specific Paid/Allowed Claims Error Rate

	Paid/Allowed Claims Error Rate				
	Including Non-Response Claims	Number of Discharges	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval
Kentucky	6.8%	232,200	$96,088,058	0.8%	5.16% - 8.45%
Massachusetts	5.8%	251,935	$118,126,985	0.7%	4.37% - 7.22%
Texas	5.6%	747,435	$288,718,229	0.8%	4% - 7.19%
Ohio	4.9%	496,299	$163,546,773	0.7%	3.49% - 6.3%
Puerto Rico	4.8%	133,991	$18,330,368	0.8%	3.16% - 6.43%
Louisiana	4.6%	212,970	$61,878,664	0.6%	3.37% - 5.88%
Tennessee	4.4%	307,001	$88,944,434	0.9%	2.56% - 6.21%
Indiana	4.3%	277,398	$76,351,328	0.5%	3.29% - 5.36%
Iowa	4.3%	148,616	$35,952,512	0.6%	3.19% - 5.44%
South Dakota	4.3%	39,555	$10,012,179	0.6%	3.06% - 5.57%
Arkansas	4.1%	145,687	$33,067,776	0.5%	2.98% - 5.13%
Illinois	4.0%	527,517	$146,666,455	0.6%	2.72% - 5.25%
Alaska	4.0%	10,225	$3,862,952	0.7%	2.65% - 5.24%
Florida	3.9%	775,356	$206,827,344	0.7%	2.59% - 5.24%
Pennsylvania	3.9%	585,795	$168,202,460	0.7%	2.51% - 5.32%
Arizona	3.9%	135,909	$36,774,762	0.6%	2.69% - 5.12%
New Jersey	3.9%	350,929	$130,922,747	0.6%	2.8% - 4.99%
California	3.7%	696,914	$252,570,921	1.0%	1.86% - 5.59%
Maryland	3.7%	235,984	$69,606,770	0.4%	2.83% - 4.6%
New York	3.7%	680,854	$238,336,525	0.6%	2.55% - 4.76%
Maine	3.6%	63,381	$15,110,708	0.5%	2.64% - 4.63%
New Mexico	3.6%	47,571	$11,044,024	0.8%	2.11% - 5.14%
South Carolina	3.6%	195,792	$47,175,349	0.6%	2.38% - 4.81%
	Average = 3.5 %				
Nevada	3.2%	48,065	$11,980,818	0.6%	2.07% - 4.4%
West Virginia	3.1%	123,984	$22,139,736	0.5%	2.01% - 4.12%
Rhode Island	2.9%	35,878	$8,187,743	0.4%	2.08% - 3.77%
Michigan	2.9%	428,604	$93,456,902	0.5%	1.89% - 3.92%
Colorado	2.7%	93,979	$17,719,393	0.6%	1.51% - 3.82%
Missouri	2.7%	284,644	$49,983,035	0.5%	1.75% - 3.56%
Mississippi	2.5%	163,888	$22,207,376	0.7%	1.24% - 3.83%
Vermont	2.4%	21,579	$3,827,984	0.5%	1.5% - 3.35%
Delaware	2.4%	33,105	$6,051,797	0.4%	1.55% - 3.26%
Utah	2.4%	51,364	$8,880,784	0.4%	1.58% - 3.23%
Nebraska	2.4%	67,512	$11,576,521	0.5%	1.46% - 3.31%
Oregon	2.4%	93,171	$15,652,946	0.6%	1.26% - 3.45%
Washington	2.3%	151,089	$27,572,741	0.4%	1.57% - 3.04%
New Hampshire	2.3%	41,807	$7,181,722	0.4%	1.45% - 3.12%
Oklahoma	2.2%	158,986	$20,586,713	0.5%	1.2% - 3.27%
Virginia	2.0%	281,809	$36,434,463	0.4%	1.13% - 2.82%
North Dakota	1.9%	32,377	$3,892,583	0.4%	1.18% - 2.55%
Alabama	1.8%	264,209	$26,535,297	0.6%	0.57% - 3%
DC	1.6%	36,970	$6,183,246	0.5%	0.69% - 2.5%
Georgia	1.4%	303,350	$29,407,480	0.4%	0.55% - 2.28%
Connecticut	1.3%	129,687	$14,897,032	0.4%	0.46% - 2.15%
Minnesota	1.3%	190,137	$17,500,364	0.4%	0.45% - 2.14%
Wisconsin	1.1%	219,394	$16,296,164	0.3%	0.53% - 1.72%
Kansas	1.1%	116,971	$7,561,228	0.5%	0.03% - 2.12%
Idaho	0.8%	37,562	$1,863,334	0.3%	0.2% - 1.45%
North Carolina	0.8%	374,831	$19,057,999	0.4%	0% - 1.53%
Montana	0.6%	41,617	$1,414,370	0.2%	0.23% - 0.9%
Wyoming	0.3%	17,252	$314,992	0.3%	-0.2% - 0.85%
Hawaii	0.3%	24,098	$524,902	0.4%	-0.6% - 1.1%
All QIOs	**3.5%**	**11,167,233**	**$2,827,007,988**	**0.1%**	**3.24% - 3.79%**

Paid Claims Error Rates By Service Type[11]

Table 9 displays the paid claims error rate by service type of claims billed to Carriers. Some service types are not displayed due to insufficient representation in claims sample volume.

Table 9: Carrier Paid/Allowed Claims Error Rates by Service Type

Service Type Billed to Carriers	Paid/Allowed Claims Error Rate					
	Including Non-Response Claims	Number of Line Items (Sample)	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims
Hospital visit - subsequent	35.8%	4,842	$1,762,372,359	1.7%	32.51% - 39.17%	26.5%
Hospital visit - initial	35.4%	671	$431,132,375	2.2%	31.09% - 39.65%	28.1%
Hospital visit - critical care	33.4%	176	$178,088,215	4.7%	24.15% - 42.68%	26.2%
Other - non-Medicare Fee Schedule	32.4%	365	$14,480,785	4.8%	22.91% - 41.83%	8.5%
Dialysis services (Non MFS)	29.4%	141	$178,764,417	5.6%	18.41% - 40.34%	21.3%
Nursing home visit	24.4%	1,395	$262,925,056	1.7%	21.01% - 27.70%	14.4%
Consultations	24.0%	1,766	$807,110,388	1.3%	21.53% - 26.49%	17.3%
Specialist – other	23.9%	198	$42,083,443	4.9%	14.32% - 33.56%	13.2%
Oncology – other	23.5%	291	$50,907,443	3.4%	16.81% - 30.22%	14.8%
Dialysis services	21.5%	233	$61,059,487	4.8%	12.20% - 30.85%	15.1%
Minor procedures - other (Medicare Fee Schedule)	20.5%	3,349	$400,307,445	1.7%	17.16% - 23.77%	13.2%
Immunizations/Vaccinations	19.5%	1,884	$33,786,831	1.6%	16.38% - 22.65%	7.0%
Office visits – new	19.3%	1,000	$266,958,942	1.5%	16.47% - 22.17%	15.2%
Echography – other	19.3%	305	$62,955,014	4.6%	10.28% - 28.28%	9.4%
Advanced imaging – CAT: head	18.7%	264	$43,962,457	3.7%	11.48% - 25.86%	4.6%
Emergency room visit	18.4%	1,219	$294,051,842	1.6%	15.32% - 21.57%	5.4%
Major procedure, cardiovascular-Other	18.2%	313	$236,797,865	5.1%	8.28% - 28.14%	2.2%
Other tests - electrocardiograms	18.0%	1,865	$90,106,626	1.5%	15.08% - 20.97%	10.0%
Standard imaging - other	16.5%	566	$46,752,604	3.3%	9.99% - 22.91%	3.0%

Service Type Billed to Carriers	Paid/Allowed Claims Error Rate					
	Including Non-Response Claims	Number of Line Items (Sample)	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims
Chiropractic	16.3%	1,127	$78,896,696	1.8%	12.81% - 19.88%	11.6%
Advanced imaging - MRI: brain	16.2%	123	$77,555,967	3.6%	9.22% - 23.19%	0.2%
Anesthesia	16.1%	703	$221,371,006	2.7%	10.80% - 21.38%	6.3%
Home visit	15.9%	117	$24,268,438	5.6%	4.90% - 26.80%	9.4%
Advanced imaging - CAT: other	15.1%	747	$198,204,448	4.3%	6.67% - 23.56%	1.1%
Lab tests - blood counts	14.5%	1,860	$43,363,608	1.1%	12.42% - 16.62%	3.8%
Specialist - pathology	14.5%	935	$127,400,260	2.1%	10.43% - 18.47%	4.4%
Lab tests - routine venipuncture (non Medicare fee schedule)	12.6%	3,945	$22,768,507	1.1%	10.44% - 14.78%	4.0%
Lab tests - urinalysis	12.6%	1,216	$8,720,906	1.2%	10.27% - 14.88%	7.3%
Lab tests - automated general profiles	12.5%	1,980	$43,381,576	1.2%	10.08% - 14.84%	3.0%
Standard imaging - chest	12.3%	2,227	$55,068,588	1.2%	9.96% - 14.70%	4.9%
Standard imaging - musculoskeletal	12.3%	1,888	$88,007,159	1.4%	9.52% - 15.12%	4.4%
Lab tests - other (non-Medicare fee schedule)	12.2%	8,739	$210,611,302	0.8%	10.56% - 13.79%	3.9%
Lab tests - bacterial cultures	12.2%	297	$6,264,068	2.4%	7.40% - 16.94%	5.7%
Imaging/procedure - other	12.1%	257	$47,406,561	2.0%	8.23% - 15.93%	0.3%
Specialist - psychiatry	11.7%	1,177	$109,157,133	2.4%	6.97% - 16.33%	4.2%
Other tests - other	11.3%	1,031	$105,357,409	2.0%	7.44% - 15.20%	5.4%
Echography - carotid arteries	11.2%	168	$25,168,888	5.6%	0.21% - 22.21%	5.0%
Lab tests - glucose	11.0%	446	$3,009,266	2.4%	6.28% - 15.73%	7.4%
Minor procedures - musculoskeletal	10.8%	600	$66,684,627	1.7%	7.55% - 14.05%	2.9%
Chemotherapy	10.0%	309	$247,585,108	2.9%	4.29% - 15.74%	4.1%
Office visits - established	10.0%	13,308	$1,030,148,575	0.4%	9.20% - 10.78%	5.2%
Other drugs	9.9%	1,570	$332,884,087	2.0%	5.92% - 13.87%	4.4%
Major procedure - Other	9.5%	163	$76,965,851	3.1%	3.39% - 15.68%	0.4%
Lab tests - other (Medicare fee schedule)	9.4%	180	$19,793,888	2.7%	4.15% - 14.64%	2.4%
Oncology - radiation therapy	9.4%	524	$123,648,797	2.5%	4.39% - 14.36%	4.7%

Service Type Billed to Carriers	Paid/Allowed Claims Error Rate					
	Including Non-Response Claims	Number of Line Items (Sample)	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims
Echography - eye	9.2%	153	$11,005,556	3.7%	2.01% - 16.46%	8.4%
No Betos Code	9.2%	211	$20,361,361	3.9%	1.60% - 16.70%	6.0%
Other tests - EKG monitoring	9.1%	113	$17,108,341	3.0%	3.22% - 14.92%	5.1%
Ambulance	8.8%	1,549	$268,224,717	1.2%	6.42% - 11.17%	4.7%
Echography - abdomen/pelvis	8.4%	262	$18,917,683	2.7%	3.08% - 13.71%	3.0%
Echography - heart	8.2%	1,136	$101,352,141	1.8%	4.80% - 11.69%	2.0%
Endoscopy - upper gastrointestinal	7.9%	188	$43,034,469	2.7%	2.73% - 13.13%	4.6%
Other tests - cardiovascular stress tests	7.6%	353	$23,263,720	1.9%	3.93% - 11.20%	4.2%
Minor procedures - skin	7.6%	1,036	$89,466,412	1.4%	4.80% - 10.32%	2.4%
Standard imaging - contrast gastrointestinal	7.3%	117	$7,053,353	2.1%	3.13% - 11.40%	3.2%
Standard imaging - breast	7.2%	552	$31,094,910	1.8%	3.81% - 10.67%	1.2%
Eye procedure - cataract removal/lens insertion	7.2%	239	$167,090,078	2.6%	2.17% - 12.23%	4.2%
Advanced imaging - MRI: other	7.0%	190	$69,887,890	2.5%	2.08% - 11.99%	1.3%
Specialist - ophthalmology	6.9%	1,764	$138,218,828	1.0%	4.86% - 8.95%	2.8%
Ambulatory procedures - skin	6.2%	1,109	$73,101,198	1.7%	2.95% - 9.54%	1.5%
Standard imaging - nuclear medicine	5.5%	691	$72,646,601	1.7%	2.12% - 8.88%	1.6%
Ambulatory procedures - other	4.6%	226	$31,305,948	1.8%	1.11% - 8.13%	0.5%
Endoscopy - colonoscopy	3.6%	252	$34,679,111	1.3%	1.05% - 6.17%	0.3%
Eye procedure - other	3.2%	149	$23,056,448	2.0%	(0.73%) - 7.08%	0.1%

Table 10 displays the paid claims error rate by service type of claims billed to DMERCs. Some service types are not displayed due to insufficient representation in claims sample volume.

Table 10: DMERC Paid/Allowed Claims Error Rates By Service Type

Service Type Billed to DMERCs	Paid/Allowed Claims Error Rate					
	Including Non-Response Claims	Number of Line Items (Sample)	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims
Surgical Dressings	40.0%	121	$23,341,786	23.0%	(5.14%) - 85.10%	8.1%
Lower Limb Orthoses	34.9%	128	$83,806,437	8.8%	17.68% - 52.10%	18.0%
No DME Code	32.6%	106	$30,991,735	7.1%	18.67% - 46.54%	17.1%
Urological Supplies	30.3%	240	$26,750,172	11.2%	8.49% - 52.19%	28.1%
Ostomy Supplies	23.5%	522	$26,922,672	4.0%	15.57% - 31.40%	21.1%
Respiratory Assist Device	23.3%	68	$33,362,147	10.7%	2.35% - 44.33%	19.6%
Immunosuppressive Drugs	20.7%	114	$44,234,968	6.5%	7.91% - 33.56%	19.6%
Glucose Monitor	20.3%	2,326	$186,777,562	1.5%	17.36% - 23.30%	18.8%
Nebulizers & Related Drugs	19.6%	3,151	$260,726,851	1.9%	15.97% - 23.24%	7.0%
Support Surfaces	18.4%	85	$28,290,682	6.5%	5.66% - 31.07%	16.4%
Lenses	15.8%	320	$14,913,996	2.9%	10.18% - 21.46%	10.7%
Upper Limb Orthoses	14.6%	73	$12,834,970	11.5%	(7.95%) - 37.13%	0.1%
Commodes/Bed Pans/Urinals	12.7%	95	$6,065,794	4.8%	3.31% - 22.07%	7.8%
Diabetic Shoes	10.8%	125	$11,573,103	4.1%	2.80% - 18.77%	8.6%
Enteral Nutrition	9.9%	515	$57,871,646	2.2%	5.63% - 14.09%	6.3%
CPAP	9.7%	349	$12,468,562	2.7%	4.37% - 14.95%	6.8%
Wheelchairs	9.5%	1,232	$117,661,886	5.3%	(0.81%) - 19.84%	8.6%
Walkers	9.3%	159	$8,439,321	2.9%	3.72% - 14.88%	5.6%
Canes/Crutches	8.4%	55	$836,528	4.9%	(1.07%) - 17.93%	6.7%
Oxygen Supplies/Equipment	5.2%	2,556	$108,522,180	0.7%	3.85% - 6.56%	3.9%
Hospital Beds/Accessories	3.8%	486	$13,685,496	1.0%	1.85% - 5.81%	1.2%
Patient Lift	1.0%	57	$291,077	1.1%	(1.02%) - 3.08%	1.0%

Table 11: FI Paid/Allowed Claims Error Rates By Service Type

Service Type Billed to FIs	Paid/Allowed Claims Error Rate					
	Including Non-Response Claims	Number of Line Items (Sample)	Projected Dollars Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims
Non-PPS Hospital In-patient	53.0%	1,968	$901,682,943	7.8%	37.79% - 68.21%	9.2%
FQHC	23.0%	131	$55,896,852	3.7%	15.67% - 30.23%	1.8%
ESRD	20.7%	1,362	$1,166,103,684	4.3%	12.21% - 29.14%	6.9%
SNF	20.2%	4,259	$302,661,576	5.0%	10.26% - 30.03%	12.5%
Other FI Billers	15.1%	10,146	$1,097,413,201	4.4%	6.45% - 23.72%	3.4%
OPPS, Laboratory (Billing an FI), Ambulatory (Billing an FI)	14.7%	41,971	$3,732,254,238	1.6%	11.70% - 17.78%	4.4%
RHCs	12.3%	862	$63,642,672	2.3%	7.87% - 16.69%	2.1%
Hospice	7.6%	283	$343,357,121	2.0%	3.62% - 11.51%	1.6%
HHA	4.7%	711	$441,359,318	1.1%	2.53% - 6.80%	0.6%
Free Standing Ambulatory Surgery	0.0%	141	$24,106	0.0%	(0.01%) - 0.05%	0.0%
Total	**14.4%**	**61,834**	**$8,104,395,711**	**1.1%**	**12.15% - 16.63%**	**3.9%**

Error Rates By Provider Type[11]

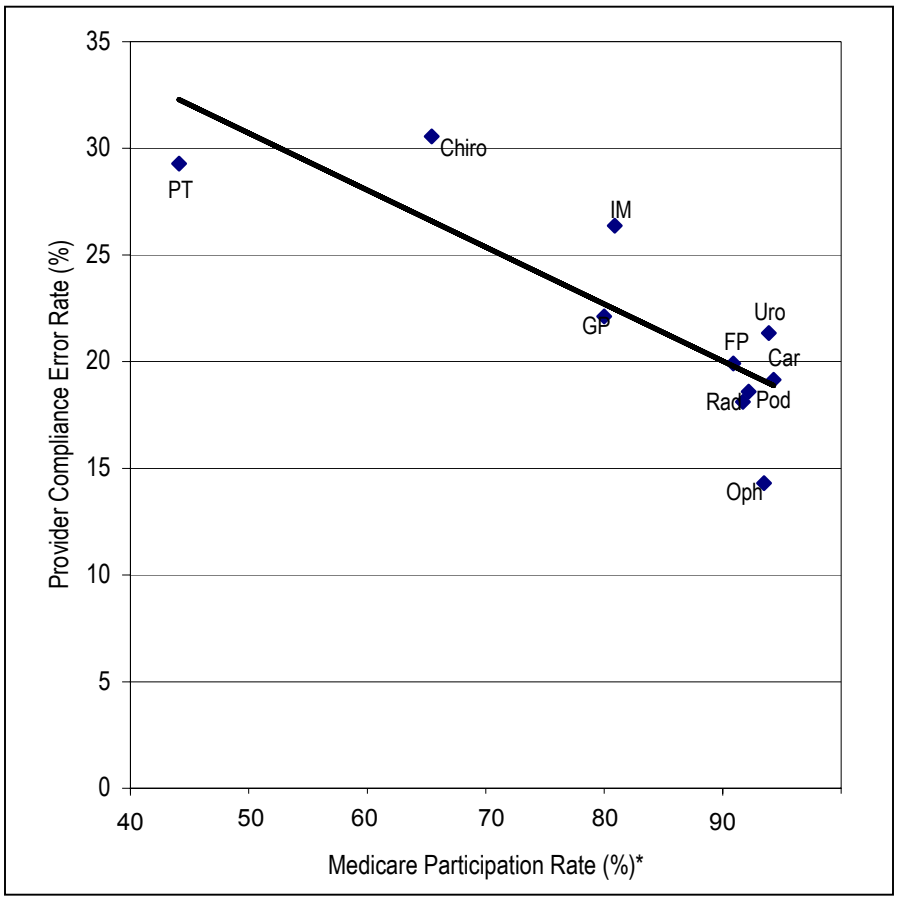
Table 12 displays the error rates by type of provider. Some provider types are not displayed due to insufficient representation in claims sample volume.

Table 12: Error Rates by Provider Type

Provider Type	Paid/Allowed Claims Error Rate					Provider Compliance Error Rate		Services Processed Error Rate	
	Including Non-Response Claims	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims
Chiropractic	16.3%	$76,784,304	1.8%	12.70% - 19.83%	11.3%	30.6%	27.3%	14.2%	10.6%
Physical Therapy	23.7%	$176,013,273	3.2%	17.45% - 29.89%	18.2%	29.4%	24.7%	21.4%	16.4%
Internal Medicine	23.1%	$2,068,262,916	1.4%	20.42% - 25.71%	13.5%	26.3%	17.5%	21.8%	15.3%
Independent Laboratory (billing a Carrier)	12.2%	$267,754,627	0.9%	10.43% - 14.00%	2.8%	25.1%	18.1%	12.1%	4.4%
Other Carrier Billers	14.9%	$4,625,811,739	0.7%	13.55% - 16.20%	7.3%	22.7%	16.3%	19.2%	12.9%
General Practitioner	17.7%	$178,760,525	2.2%	13.33% - 22.10%	7.8%	21.6%	12.7%	21.0%	13.0%
Urology	8.9%	$236,118,366	1.4%	6.16% - 11.56%	5.3%	20.9%	18.2%	13.2%	10.6%
Hematology/ Oncology	9.9%	$321,910,889	1.7%	6.67% - 13.17%	5.4%	21.1%	17.7%	15.5%	10.0%
Family Practitioner	16.5%	$632,616,380	1.0%	14.55% - 18.42%	10.0%	19.8%	13.9%	17.5%	13.1%
Cardiologist	15.0%		1.3%	12.47% - 17.53%	8.8%	19.2%	13.6%	20.1%	13.2%
Podiatry	9.2%	$114,230,048	1.4%	6.47% - 11.88%	4.0%	18.7%	14.5%	11.7%	8.5%
Diagnostic Radiology	10.8%	$490,520,471	1.5%	7.76% - 13.75%	1.9%	18.2%	10.7%	13.6%	5.8%
All DMERCs	**13.6%**	**$1,288,933,007**	**1.2%**	**11.17% - 16.04%**	**9.2%**	**15.9%**	**11.7%**	**13.7%**	**10.7%**
Ophthalmology	5.6%	$261,666,261	0.9%	3.79% - 7.36%	3.0%	14.3%	12.3%	8.8%	6.2%
Ambulance (billing a Carrier)	8.8%	$266,332,454	1.2%	6.38% - 11.14%	4.7%	13.8%	10.2%	13.6%	8.9%

Provider Type	Paid/Allowed Claims Error Rate					Provider Compliance Error Rate		Services Processed Error Rate	
	Including Non-Response Claims	Projected Dollars Allowed Incorrectly Including Non-Response Claims	Standard Error	95% Confidence Interval	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims	Including Non-Response Claims	Excluding Non-Response Claims
HHA	4.7%	$441,359,318	1.1%	2.53% - 6.80%	0.6%	N/A	N/A	5.5%	0.7%
Free Standing Ambulatory Surgery	0.0%	$24,106	0.0%	(0.01%) - 0.05%	0.0%	N/A	N/A	1.2%	1.2%
OPPS, Laboratory (Billing an FI), Ambulatory (Billing an FI)	14.7%	$3,732,254,238	1.6%	11.70% - 17.78%	4.4%	N/A	N/A	18.5%	6.4%
Other FI Billers	15.1%	$1,097,413,201	4.4%	6.45% - 23.72%	3.4%	N/A	N/A	14.0%	6.0%
Hospice	7.6%	$343,357,121	2.0%	3.62% - 11.51%	1.6%	N/A	N/A	7.2%	1.5%
SNF	20.2%	$302,661,576	5.0%	10.26% - 30.03%	12.5%	N/A	N/A	9.3%	5.1%
Non-PPS Hospital In-patient	53.0%	$901,682,943	7.8%	37.79% - 68.21%	9.2%	N/A	N/A	29.6%	9.9%
FQHC	23.0%	$55,896,852	3.7%	15.67% - 30.23%	1.8%	N/A	N/A	18.5%	1.5%
ESRD	20.7%	$1,166,103,684	4.3%	12.21% - 29.14%	6.9%	N/A	N/A	20.8%	10.9%
RHCs	12.3%	$63,642,672	2.3%	7.87% - 16.69%	2.1%	N/A	N/A	10.2%	1.7%
Inpatient PPS	3.5%	$2,827,007,988	0.1%	3.24% - 3.79%	N/A	N/A	N/A	N/A	N/A

Figure 7: Provider Compliance Error Rate for Selected Provider Types that Bill Carriers by Medicare Participation Rate



*From 2002 data compendium.

** Diagnostic Radiologists are not separated from the radiology total.

PT: Physical Therapy
Chiro: Chiropractic
IM: Internal Medicine
GP: General Practitioner
Uro: Urology
FP: Family Practitioner
Car: Cardiologist
Rad: Radiologist
Pod: Podiatrist
Oph: Ophthalmology

Figure 7 shows the effect of participation on the paid claims error rate by type of provider. As the provider's Medicare participation increases, the provider compliance error rate decreases.

Among the historical MD/DO specialties, it is apparent that there is a trend to see higher provider compliance error rates among the generalist primary care specialties, compared to the subspecialties. This observation was supported by subsequent formal examination. For each of these eight specialties seen in figure 8, an index of its practice breadth was determined, using the minimum number of unique HCPCS codes needed to encompass 75 percent of provider services volume. In simple terms, how many different procedures do practitioners in these specialties typically perform? Intuitively, a general practitioner would likely have a more diverse practice than an ophthalmologist would.

Figure 8: Provider Compliance Error Rate for Selected Provider Types that Bill Carriers by Competence of HCPCS

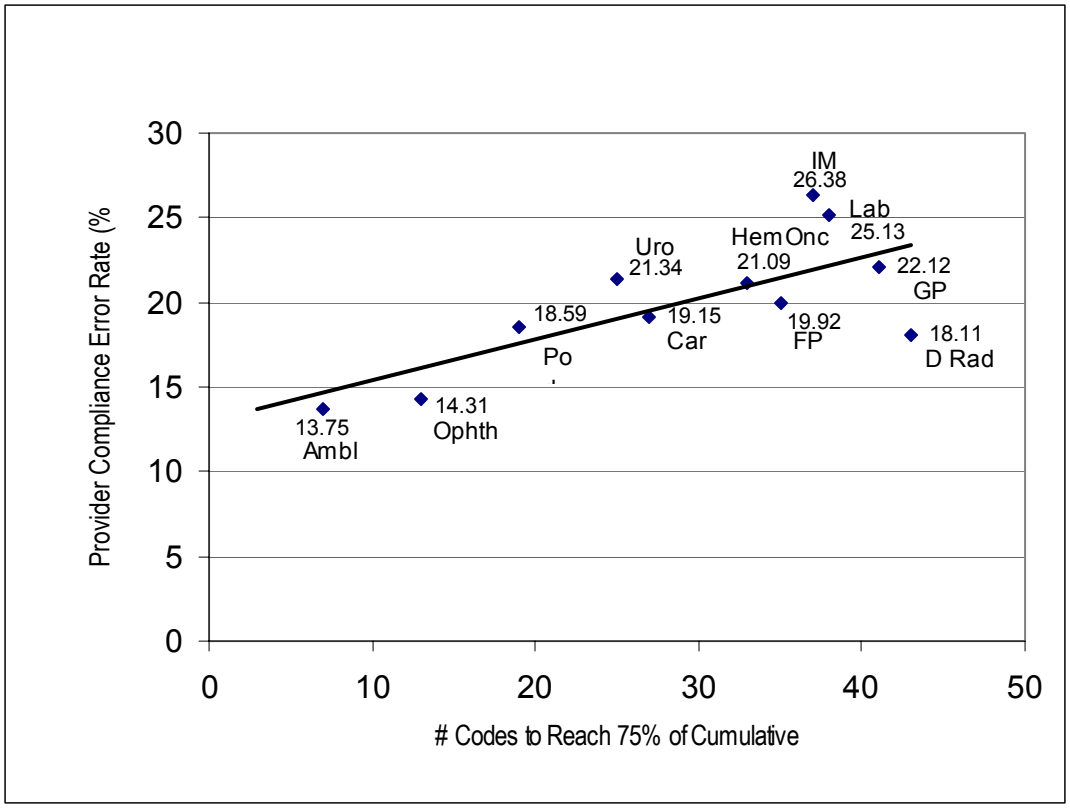


Figure 8 demonstrates the correlation between the number of HCPCS the provider knows and understands and the provider compliance error rate. This figure shows that as the number of codes needed by a specialty increases the error rate also increases.

CORRECTIVE ACTIONS

Reasons the 2003 Rate is Higher than the 2003 Goal

One of the CMS performance goals for FY 2003 is to reduce the percentage of improper payments made under the FFS program to 5% or less. As discussed previously in this report, our adjusted error rate for FY 2003 is 5.8 percent[1]. Below is a detailed discussion of the reasons CMS did not meet the goal.

CMS undertook the CERT error rate program to better quantify the Medicare FFS payment errors. CMS has worked diligently over the years to continually reduce the error rate. Working with the OIG, CMS refined their methodology to improve identification of the errors and be better positioned to correct them. CMS believes the CERT program achieves these objectives. For the first time ever, CMS has information about the errors not only at national level but also at a contractor and provider specific level. These additional levels provide CMS with more precise information about what exactly is causing the errors and allows CMS, as well as the contractor and provider communities, to design more effective correction plans to resolve the errors.

In analyzing the national error rates, CMS found that although the national error rates have been adjusted to more accurately reflect a true non-response rate, there were still too many non-response claims. The CERT non-responses are attributable to multiple factors, including:

- *Providers' lack of familiarity with the CERT contractor (as compared to the OIG).*

  When the OIG requested records from providers to calculate a national error rate, providers understood the importance of complying with the OIG. However, this year the CERT contractor took over the function of calculating the error rate for Carriers/DMERCs/FIs. Many providers were not familiar with the CERT contractor and may therefore have been more reluctant to submit medical records to an unknown company.

- *Providers' confusion regarding Heath Insurance Portability and Accountability Act (HIPAA) compliance.*

  HIPAA includes national standards to protect individuals' personal health information, including their medical records. As part of HIPAA, there are limits on the use and release of health records, and providers may not have realized that sending medical records to the CERT contractor was not a HIPAA violation.

- *The CERT contractor did not have accurate addresses for many providers.*

  The CERT contractor only obtained one address for each provider. In many cases that address was where Carriers/DMERCs/FIs sent payments and not where the provider delivered services and kept medical records. However, Carriers/DMERCs/FIs may have as many as sixteen addresses for a given provider.

- *The OIG conducted a more intense follow-up process than CMS required for CERT.*

  The OIG attempted seven follow-up contacts with tardy providers; the CERT contractor issued a maximum of four letters during the timeframes covered by this report. The OIG had their agents visit providers in order to obtain the requested documentation. Due to resource constraints, the CERT contractor did not employ in-person follow-up visits.

- *Providers' response to the CERT contractor's requests may have been time consuming and costly.*

  The financial and manpower costs of providing hard copies of medical records may have discouraged some providers, from providing requested information to the CERT contractor.

CMS Corrective Actions Aimed at Lowering the Error Rate by Correcting the Non-Response Problem

CMS has implemented numerous initiatives that reduced the paid claims error rate from 13.8 percent in 1996 to 6.3 percent in 2002. In order to reach the goal of lowering the error rate including non-response claims to 4 percent by 2008, CMS must correct the high provider non-response. CMS is implementing a number of new corrective actions to correct the non-response problem including but not limited to the following:

1. CMS revised the letters requesting medical records by clarifying the role of the CERT contractor and explaining that it is not a HIPAA compliance violation to submit records to the CERT contractor.
2. Carriers/DMERCs/FIs have been educating providers about the CERT contractor so that providers are not hesitant about sending in requested medical records.

3. CMS has requested funding to support an Electronic Medical Record (EMR) Submission Pilot to facilitate the process and timeliness of submitting medical records.
4. The CERT contractor has initiated a new process for contacting providers who fail to respond to CERT requests, including multiple letters, phone calls, and faxes to remind providers to submit medical records.
5. The CERT contractor will develop a mechanism to allow Carriers/DMERCs/FIs to see which providers have not responded to CERT documentation requests. Carriers/DMERCs/FIs can then assist in the process of contacting non-responding providers to encourage them to respond.
6. The CERT contractor is using a more advanced system to identify multiple provider addresses when letters are undeliverable due to incorrect addresses.
7. The CERT contractor has established a fax line for providers who wish to fax medical records rather than mailing them.
8. CMS plans to change the Medicare provider directory to allow providers to update their addresses, which should lead to faster updates.
9. CMS plans to conduct a Non-Responder Special Study to estimate the degree to which non-response claims represent "true" errors.
10. CMS will change the CERT methodology to adjust the error rates when a provider appeals a non-response case to the Carrier/DMERC/FI and the Carrier/DMERC/FI concludes that the claim should be paid. This change will make the CERT program more consistent with the HPMP (where appeals have always been reflected in the error rate) and will allow CMS and Carriers/DMERCs/FIs to focus on "real" problems rather than focusing on the non-responder problem.
11. The CERT will provide lists of the highest non-responders to requests for medical records for action considered by the OIG.

Other CMS Corrective Actions Aimed at Lowering the Error Rate

During the past several years, CMS and its contractors have undertaken a number of actions aimed at lowering the error rates. These actions will continue because CMS believes that provider education is one of the best tools to prevent errors. For example:

- CMS has required its contractors to intensify their one-on-one educational programs to target known problems that contribute to error rates. For instance, CMS has emphasized that providers need in-depth assistance to understand the requirements for billing evaluation and management codes and that home health agencies need to pay careful attention to insure that appropriate evidence exists to show that services are needed.

- Contractors have implemented educational programs that entail both broad based efforts and more focused communication with specific providers or provider groups concerning specific billing problems. The broad based efforts include websites that provide detailed information on Medicare payment policies, provider training sessions, open door forums for focused communications, and written materials that explain payment policies in detail.

- CMS has required its contractors to develop annual medical review strategies to reduce the error rates. CMS ties contractor budgets to their strategies, and evaluates contractor performance based on how well the contractors accomplish the goals and conform to the procedures included in their strategies.

To further emphasize these corrective actions, CMS worked hard to ensure that contractor funding reflects where errors are occurring. CMS has worked with Carriers/DMERCs/FIs to ensure that they focus their activities and efforts on specific claims and provider types where the OIG and the CERT contractor have identified errors.

In addition, CMS and its contractors will undertake a series of new actions aimed at lowering the error rates. For example:

1. CMS will increase and refine one-on-one educational contacts with providers found to be billing in error.

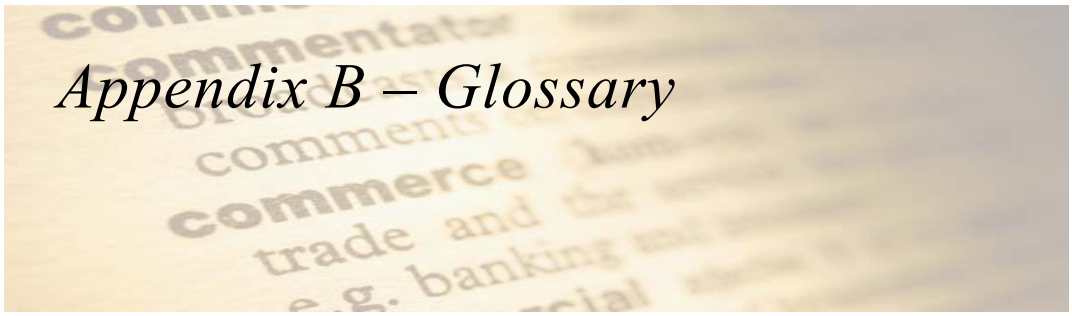
2. CMS will make it easier for providers to find the Medicare rules by developing a centralized database of national coverage, coding, and billing articles.
3. CMS will encourage contractors to address provider billing/payment questions more consistently.
4. CMS will develop and install new Correct Coding Initiative edits.
5. Contractors will clarify the chiropractic coverage and billing rules.
6. CMS will develop procedure code modifiers to allow chiropractors to better distinguish between covered care and non-covered care.
7. CMS will conduct a pilot test to determine if recovery audit firms can help identify Medicare overpayments.
8. CMS will develop a tool that generates state-specific hospital billing reports to help QIOs analyze administrative claims data.
9. CMS will develop projects with the QIOs that address state-specific admissions necessity and coding concerns as well as conduct surveillance and monitoring of inpatient payment error trends by error type.
10. CMS will accelerate the production of error rates so that contractors can get feedback about the effect that their initiatives are having on the error rates faster.
11. CMS will use the Carrier-specific and DMERC-specific error rates in the contractor performance evaluation program.
12. CMS will closely monitor and evaluate each contractor's development and implementation of their Contractor Error Rate Reduction Plans.

CMS has widely advertised the CERT contractor's activities and their effectiveness in detecting improper billing. CMS believes that the mere existence of the program as well as the initial results of CERT activities have encouraged providers to be more careful regarding how they bill Medicare and thus has increased the probability that a claim that appears error free at first sight is truly error free.

Appendix A – List of Acronyms

AC	Affiliated Contractor
BBA	Balanced Budget Act of 1997
BETOS	Berenson-Eggers Type of Service
CDAC	Clinical Data Abstraction Center
CERT	Comprehensive Error Rate Testing
CLIA	Clinical Laboratory Improvement Act
CMN	Certificate of Medical Necessity
CMS	Centers for Medicare & Medicaid Services
CTRDS	CERT Tracking and Reporting Database and System
CY	Calendar Year
DHHS	Department of Health and Human Services
DRG	Diagnosis Related Group
DME	Durable Medical Equipment
DMERC	Durable Medical Equipment Regional Carrier
DOJ	Department of Justice
EMR	Electronic Medial Records
FFS	Fee-for-Service
FI	Fiscal Intermediary
FY	Fiscal Year
GPRA	Government Performance & Results Act of 1993
HCPCS	The Healthcare Common Procedure Coding System
HCPP	Health Care Prepayment Plan
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 (9th Revision) Clinical Modification

ISG	Informative Services Group
LI	Line Item
LMRP	Local Medical Review Policy
LPET	Local Provider Education and Training
MFS	Medicare fee schedule
MIP	Medicare Integrity Program
MSP	Medicare Secondary Payer
NCH	National Claims History
NDM	Network Data Mover
OIG	Office of the Inspector General
PCCM	Primary Care Case Management
PPS	Prospective Payment System
PSC	Program Safeguard Contractor
QIO	Quality Improvement Organization
RHC	Rural Health Clinic
RHHI	Regional Home Health Intermediary
RTP	Return To Provider
SMI	Supplemental Medical Insurance
SNF	Skilled Nursing Facility



Appendix B – Glossary

A

Abuse: Payment for items or services that are billed by mistake by providers, but should not be paid for by Medicare. This is not the same as fraud.

Affiliated Contractor (AC): A Medicare Carrier, FI, or other contractor, such as a DMERC, that shares some or a PSC's entire jurisdiction and performs non-PSC Medicare functions such as claims processing or education and/or PSC assumable functions, such as medical review, that the PSC has not assumed.

Allowed Charge: Individual charge determined by a Carrier for a covered SMI medical service or supply.

Appeal: An appeal is a special kind of complaint you take if you disagree with any decision about your health care services. For example, you would file an appeal if Medicare does not pay or does not pay enough for a service you got, you do not get, or an item or service you think you should get. This complaint is made to your Medicare health plan or the Original Medicare Plan. There is usually a special process you must use to make your complaint. (See Appeal Process.)

Automated Claim Review: Claim review and determination made using system logic (edits). Automated claim reviews never require the intervention of a human to make a claim determination.

B

Balanced Budget Act of 1997 (BBA): Major provisions provide for the State Children's Health Insurance Program, Medicare+Choice, and expansion of preventive benefits.

Beneficiary: A person who has health insurance through the Medicare or Medicaid program.

Benefit Payments: Funds outlaid or expenses accrued for services delivered to beneficiaries.

Berenson-Eggers Type of Service (BETOS) Codes: A coding system that covers all HCPCS codes; assigns a HCPCS code to only one BETOS code; consists of readily understood clinical categories (as opposed to statistical or financial categories); consists of categories that permit objective assignment; is stable overtime; and is relatively immune to minor changes in technology or practice patterns.

C

Carrier: A private business, typically an insurance company, that contracts with CMS to receive, review, and pay physician and supplier claims.

The Centers for Medicare & Medicaid Services (CMS): CMS is a federal agency within the U.S. Department of Health and Human Services. Programs for which CMS is responsible include Medicare, Medicaid, State Children's Health Insurance Program, HIPAA, and Clinical Laboratory Improvement Act (CLIA).

CERT Tracking and Reporting Database and System (CTRDS): The CERT Tracking and Reporting Database and System (CTRDS) is the Information System (IS) that processes the medical claim information to produce the paid claims error reports. Specifically, CTRDS will 1) provide a means of uniquely identifying records included in the CERT sample for use in preparing requests for additional documentation and for the purpose of tracking their progress and disposition through standard claims processing systems; 2) provide a mechanism for third party independent reviewers to enter results of their reviews; 3) provide the database for which all CERT reports can be produced and the procedures to produce them; and 4) serve as the source of data for development and evaluation of systems that detect Medicare fraud, waste and abuse.

Comprehensive Error Report Testing (CERT): CMS, Office of Financial Management, Program Integrity Group developed the CERT program to produce national, contractor specific, and benefit category specific paid claim error rates. The CERT program randomly samples approximately 120,000 claims per year from Carriers, DMERCs, and FIs. This number amounts to a random selection of about 200 claims for each Carrier, DMERC, and FI on a monthly basis. This process was designed to pull a blind, electronic sample (on a daily basis) from all of the claims submitted on the day providers send them. These sampled claims are used to calculate the paid claims error rates.

Cost-Based Health Maintenance Organization (HMO/Competitive Medical Plan, CMP): A type of managed care organization that will pay for all of the enrollees/members' medical care costs in return for a monthly premium, plus any

applicable deductible or co-payment. The HMO will pay for all hospital costs (generally referred to as Part A) and physician costs (generally referred to as Part B) that it has arranged for and ordered. Like a health care prepayment plan (HCPP), except for out-of-area emergency services, if a Medicare member/enrollee chooses to obtain services that have not been arranged for by the HMO, he/she is liable for any applicable deductible and co-insurance amounts, with the balance to be paid by the regional Medicare FI and/or Carrier.

D

Deductible (Medicare): The amount you must pay for health care before Medicare begins to pay, either for each benefit period for Part A, or each year for Part B. These amounts can change every year.

Department of Health and Human Services (DHHS): (also known as HHS) DHHS is the United States government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves.

Department of Justice (DOJ): Attorneys from DOJ and the United States Attorney Offices have, under the memorandum of understanding, the same direct access to contractor data and records as OIG and the FBI. DOJ is responsible for prosecution of fraud civil or criminal cases presented.

Determination: A decision made to pay in full, pay in part, or deny a claim.

Diagnosis: The name for a beneficiary's health problem.

Diagnosis-Related Group (DRG): A classification system that groups patients according to diagnosis, type of treatment, age, and other relevant criteria. Under the prospective payment system, hospitals are paid a set fee for treating patients in a single DRG category, regardless of the actual cost of care for the individual.

Down code: Reduce the value and code of a claim when the documentation does not support the level of service billed by a provider.

Durable Medical Equipment (DME): Purchased or rented items such as hospital beds, iron lungs, oxygen equipment, seat lift equipment, wheelchairs, and other medically necessary equipment prescribed by a health care provider to be used in a patient's home which Medicare covers.

Durable Medical Equipment Regional Carrier (DMERC): A Medicare contractor responsible for administering Durable Medical Equipment (DME) benefits for a region.

E

End-stage Renal Disease (ESRD): Kidney failure that is severe enough to need lifetime dialysis or a kidney transplant.

Episode of Care: The health care services given during a certain period of time, usually during a hospital stay.

Expenditure: The issuance of checks, disbursement of cash, or electronic transfer of funds made to liquidate an expense regardless of the fiscal year the service was provided or the expense was incurred.

Expense: Funds actually spent or incurred providing goods, rendering services, or carrying out other mission related activities during a period. Expenses are computed using accrual accounting techniques that recognize costs when incurred and revenues when earned and include the effect of accounts receivable and accounts payable on determining annual income.

F

Medicare Fee Schedule (MFS): A complete listing of fees used by health plans to pay doctors or other providers.

Fee-for-Service (FFS): A plan or Primary Care Case Management (PCCM) is paid for providing services to enrollees solely through fee-for-service payments plus in most cases, a case management fee.

Fiscal Intermediary (FI): A private company that has a contract with Medicare to pay Part A and some Part B bills.

Fiscal Year (FY): For Medicare, a year-long period that runs from October 1st through September 30th of the next year. The government and some insurance companies follow a budget that is planned for a fiscal year.

Fraud: The intentional deception or misrepresentation that an individual knows, or should know, to be false, or does not believe to be true, and makes, knowing the deception could result in some unauthorized benefit to himself or some other person(s).

Full PSC or Full Program Safeguard Contractor: Performs all of the fundamental activities required by the PSC contract.

G

Government Performance and Results Act of 1993 (GPRA): The Government Performance and Results Act of 1993 seeks to shift the focus of government decision making and accountability away from the activities that are undertaken - such as grants dispensed or inspections made - to a focus on the results of those activities, such as real gains in employability, safety, responsiveness, or program quality. Under the Act, agencies are to develop multi-year strategic plans, annual performance plans, and annual performance reports.

H

Healthcare Common Procedure Coding System (HCPCS): Procedures for coding and payment determinations for clinical laboratory tests and for durable medical equipment. The HCPCS contains alpha-numeric codes used to identify those coding categories not included in the American Medical Association's CPT-4 codes.

Health Care Financing Administration (HCFA): The former name of the federal agency within the Department of Health and Human Services (DHHS) established to administer the Medicare, Medicaid, and State Children's Health Insurance Programs. The agency is now known as the Centers for Medicare & Medicaid Services.

Health Care Prepayment Plan (HCPP): A type of managed care organization. In return for a monthly premium, plus any applicable deductible or co-payment, all or most of an individual's physician services will be provided by the HCPP. The HCPP will pay for all services it has arranged for (and any emergency services) whether provided by its own physicians or its contracted network of physicians. If a member enrolled in an HCPP chooses to receive services that have not been arranged for by the HCPP, he/she is liable for any applicable Medicare deductible and/or coinsurance amounts, and the regional Medicare Carrier would pay any balance.

Health Care Provider: A person who is trained and licensed to give health care. Also, a place licensed to give health care. Doctors, nurses, pharmacists, hospitals, skilled nursing facilities, some assisted living facilities, and certain kinds of home health agencies are examples of health care providers.

Health Insurance Claim Number (HICN): The number assigned by the Social Security Administration to an individual identifying him/her as a Medicare beneficiary. This number is on the beneficiary's insurance card and is used to process Medicare claims for each beneficiary.

Health Insurance Portability & Accountability Act (HIPAA): A law passed in 1996 that is also sometimes called the "Kassebaum-Kennedy" law. This law expands your health care coverage if you have lost your job, or if you move from one job to another, HIPAA protects you and your family if you have: pre-existing medical conditions, and/or problems getting health coverage, and you think it is based on past or present health. HIPAA also:

- limits how companies can use your pre-existing medical conditions to keep you from getting health insurance coverage;
- usually gives you credit for health coverage you have had in the past;
- may give you special help with group health coverage when you lose coverage or have a new dependent; and
- generally, guarantees your right to renew your health coverage. HIPAA does not replace the states' roles as primary regulators of insurance.

Home Health Agency (HHA): An organization that gives home care services, like skilled nursing care, physical therapy, occupational therapy, speech therapy, and care by home health aides.

Home Health Care: Skilled nursing care and certain other health care you get in your home for the treatment of an illness or injury.

Hospice: Hospice is a special way of caring for people who are terminally ill, and for their family. This care includes physical care and counseling. Hospice care is covered under Medicare Part A (Hospital Insurance).

Hospital Insurance (HI): The part of Medicare that pays hospital and other institutional provider benefit claims, also referred to as Part A.

Hospital Payment Monitoring Program (HPMP): HPMP is the program that CMS established to monitor the accuracy of Medicare FFS payments made to PPS acute care inpatient hospitals.

I

Inpatient Hospital: A facility, other than psychiatric, which primarily provides diagnostic, therapeutic (both surgical and non-surgical) and rehabilitation services by or under the supervision of physicians, to patients admitted for a variety of medical reasons.

International Classification of Diseases, 9th Revision (ICD-9): A medical code set maintained by the World Health Organization (WHO). The primary purpose of this code set was to classify causes of death. A US clinical modification (CM),

extension, maintained by the NCHS within the CDC, identifies morbidity factors or diagnoses. The ICD-9-CM codes have been selected for use in the HIPAA transactions.

InterQual: A clinical decision support tool, developed by The InterQual Group of McKesson Health Solutions, used to guage the appropriateness of inpatient hospital admissions.

L

Line Item (LI): Service or item specific detail of claim.

Local Medical Review Policy (LMRP): LMRPs are policies used to make coverage and coding decisions in the absence of specific statute, regulations, national coverage policy, national coding policy, or as an adjunct to a national coverage policy.

Local Provider Education and Training (LPET): The LPET program assures appropriate claims payment through remedial and proactive provider education. The success of this goal is measured by the continual reduction in the national paid claims error rate. Inherent to that success is a comprehensive effort to educate healthcare providers on coverage and coding principles to insure correctly billed claims.

M

Managed Care: Includes Health Maintenance Organizations (HMO), Competitive Medical Plans (CMP), and other plans that provide health services on a prepayment basis, which is based on either cost or risk, depending on the type of contract they have with Medicare. See also "Medicare+Choice".

Manual Claim Review: Review, pre- or post-payment, that requires the intervention of PSC personnel.

Medically Necessary: Services or supplies that: are proper and needed for the diagnosis, or treatment of your medical condition; are provided for the diagnosis, direct care, and treatment of your medical condition; meet the standards of good medical practice in the local area; and are not mainly for the convenience of you or your doctor.

Medicare: The federal health insurance program for: people 65 years of age or older, certain younger people with disabilities, and people with End-Stage Renal Disease.

Medicare Contractor: A Medicare Part A Fiscal Intermediary (institutional), a Medicare Part B Carrier (professional), or a Medicare Durable Medical Equipment Regional Carrier (DMERC)

Medicare Coverage: Made up of two parts: Hospital Insurance (Part A) and Medical Insurance (Part B).

Medicare Integrity Program (MIP): A provision of the Health Insurance Portability and Accountability Act (HIPAA) that sets up a revolving fund to support CMS with specific contracting authority to promote the integrity of the Medicare program.

Medical Review Specialist (MRS): A medical professional, usually a Registered Nurse, that performs first level medical claim review. Generally, this includes experts who are non-physicians.

Medicare Secondary Payer (MSP): A statutory requirement that private insurers who provide general health insurance coverage to Medicare beneficiaries must pay beneficiary claims as primary payers.

Medicare Trust Funds: Treasury accounts established by the Social Security Act for the receipt of revenues, maintenance of reserves, and disbursement of payments for the HI and Supplemental Medical Insurance (SMI) programs.

N

National Claims History (NCH): The National Claims History (NCH) database is an integral part of CMS' growing data environment. As the single storehouse for both Part A & Part B, and 100% of End Stage Renal Disease (ESRD) claims, the NCH is the foundation for the CMS planned single-site repository for all claims and utilization data.

National Coverage Policy: A policy developed by CMS that indicates whether and under what circumstances certain services are covered under the Medicare program. It is published in CMS regulations, published in the Federal Register as a final notice, contained in a CMS ruling, or issued as a program instruction.

Non-Covered Service: The service:

- does not meet the requirements of a Medicare benefit category,
- is statutorily excluded from coverage on ground other than 1862(a)(1), or
- is not reasonable and necessary under 1862 (a) (1).

Network Data Mover (NDM): The Network Data Mover, or CONNECT:DIRECT, allows automated file transfers between applications within the CMS enterprise and with ACs. It supports multiple platforms from the mainframe enterprise server to the desktop, providing seamless data delivery across private networks.

O

Office of the Inspector General (OIG): The primary mission of the OIG is to protect and recommend improvements to the programs and management of the Department of Health and Human Services.

Outpatient Care: Medical or surgical care that does not include an overnight hospital stay.

Outpatient Hospital: A portion of a hospital that provides diagnostic, therapeutic (both surgical and non-surgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization.
Part of the Hospital providing services covered by SMI, including services in an emergency room or outpatient clinic, ambulatory surgical procedures, medical supplies such as splints, laboratory tests billed by the hospital, etc.

Outpatient Hospital Services: Medical or surgical care that Medicare Part B helps pay for and does not include an overnight hospital stay, including:

- blood transfusions;
- certain drugs;
- hospital billed laboratory tests;
- mental health care;
- medical supplies such as splints and casts;
- emergency room or outpatient clinic, including same day surgery; and
- x-rays and other radiation services.

Outpatient Prospective Payment System: The way that Medicare will pay for most outpatient services at hospitals or community mental health centers under Medicare Part B.

Outpatient Services: A service you get in one day (24 hours) at a hospital outpatient department or community mental health center.

Overpayment Assessment: A decision that an incorrect amount of money has been paid for Medicare services and a determination of what that amount is.

P

Part A: Hospital insurance that pays for inpatient hospital stays, care in a skilled nursing facility, hospice care, and some home health care.

Part B: Medicare medical insurance that helps pay for doctors' services, outpatient hospital care, durable medical equipment, and some medical services that are not covered by Part A.

Program Safeguard Contractor (PSC): A contractor hired under CMS to perform program integrity and data analysis activities.

Prospective Payment System (PPS): A method of reimbursement in which Medicare payment is made based on a predetermined, fixed amount. The payment amount for a particular service is derived based on the classification system of that service (for example, DRGs for inpatient hospital services).

Provider: Any Medicare provider (e.g., hospital, skilled nursing facility, home health agency, outpatient physical therapy, comprehensive outpatient rehabilitation facility, end-stage renal disease facility, hospice, physician, non-physician provider, laboratory, supplier, etc.) providing medical services covered under Medicare Part A. Any organization, institution, or individual that provides health care services to Medicare beneficiaries. Physicians, ambulatory surgical centers, and outpatient clinics are some of the providers of services covered under Medicare Part B.

Q

Quality Improvement Organizations (QIOs): Groups of practicing doctors and other health care experts. They are paid by the federal government to check and improve the care given to Medicare patients. They must review your complaints about the quality of care given by: inpatient hospitals, hospital outpatient departments, hospital emergency rooms, skilled nursing facilities, home health agencies, Private Fee-for-Service plans, and ambulatory surgical centers.

R

Regional Home Health Intermediary (RHHI): A private company that contracts with Medicare to pay home health bills and monitor the quality of home health care.

S

Skilled Nursing Facility (SNF): A nursing facility with the staff and equipment to give skilled nursing care and/or skilled rehabilitation services and other related health services.

Social Security Act: Public Law 74-271, enacted on August 14, 1935, with subsequent amendments. The Social Security Act consists of 20 titles, four of which have been repealed. Title XVIII of the Social Security Act authorizes the HI and SMI programs.

Supplier: Generally, any company, person, or agency that gives you a medical item or service, like a wheelchair or walker.

T

Trust Fund: Separate accounts in the U.S. Treasury, mandated by Congress, whose assets may be used only for a specified purpose. For the SMI trust fund, monies not withdrawn for current benefit payments and administrative expenses are invested in interest-bearing federal securities, as required by law; the interest earned is also deposited in the trust fund.

Appendix C – CERT Methodology

The CERT contractor examined the universe of claims from which they drew the sample for volume, data validity, and representativeness of the contractors' payment environment. Because of this randomization process, it was very unlikely that the distribution of characteristics of providers in the CERT sample is not representative of characteristics in the provider universe.

The CERT contractor clustered Carriers and FIs into groupings. CMS formed the groupings based on contractor type, geographic location, Local Medical Review Policies (LMRP), processing centers, and the size of the population in the service area. For example, the CERT contractor sampled Trailblazer Part B from two clusters: Texas and the other Part B Trailblazer states (Virginia, Delaware, Maryland, and District of Columbia). The CERT contractor drew random samples from each of the 25 Carrier clusters and each of the four DMERCs for claims entering the contractor processing system for a twelve-month period from January 1, 2002 through December 31, 2002. Similarly, they drew a random sample from each of the 31 FI clusters for claims entering the processing system for a seven-month period from June 1, 2002 through December 31, 2002. The CERT contractor has adopted a systematic sampling methodology that is a modified form of simple random sampling involving the selection of claims in a systematic fashion. In general, we used a random start to select the first claim and selected every k^{th} claim thereafter. Thus, not all of the claims sampled for CERT review were paid claims.

CMS designed this study to sample approximately 2,000 claims per Carrier cluster and 2,000 claims per DMERC over a 12-month period. The CERT system sampled the claims on the day they entered the contractors' processing systems. The CERT contractor reviewed claim line items to estimate the paid claims error rate, the provider compliance error rate, and the services processed error rate.

The claim line resolution code and the final allowed charge were essential pairing elements of the CERT medical review process. There were a small number of claims found as part of the preparation for medical review in which the claim line resolution indicator was inconsistent with the claim line "final allowed charge" that the payment contractor provided. For the small number of cases noted above, the medical reviewer manually verified the final allowed charge and payment decision in order to continue with normal CERT processing of the claims.

Claims go through one of three payment processes at the Carrier/DMERC/FI level.

- Technical Edit (T): Carriers/DMERCs/FIs deny claims for medical and non-medical reasons during an automated review. The CERT contractor denotes them in the system as a **T** (technical edit) sample reason assignment (SAMPREAS).
- Validation Action (V): Other claims go through manual medical review, and the Carrier/DMERC/FI approves, reduces, or denies the claim. These types of claims were denoted in the system as a **V** (validation action) SAMPREAS.
- Original Paid Claims (O): Carriers/DMERCs/FIs approved and paid the majority of claims after automated review. The CERT contractor denoted these claims as an **O** (original paid claim) SAMPREAS.

Some line items did not receive an O, V, or T designation. These line items were grouped into two general categories, "No Resolution Code", and "Returned to Provider". The "No Resolution Code" designation resulted when the resolution file was not provided to the CERT contractor. The CERT contractor had a procedure in place that required four requests to the Carrier/DMERC/FI (an initial and three follow-ups) for a missing resolution file. If the contractor did not return the file, the CERT contractor noted that the contractor could not locate the claim. The "Returned to Provider" designation included sample claims that did not pass the contractor's automated "front end" edits for completeness and accuracy prior to processing and that the Carrier/DMERC/FI returned to the provider (RTP) for correction.

In addition, this report classifies other types of line item "events" as errors by default. Classification of these events is important because it affected the error rates. These events included "failure to respond to requests for documentation after the 45-day OIG letter" and "no address or record of patient."

Operational Definitions for Paid Claims, Provider Compliance, and Services Processed and Error Rates

Paid Claims Error Rate Formula

This rate includes all O line items and V claims or line items for which the Carrier/DMERC/FI allowed any portion of the claim or line in the paid claims error rate. In other words, the paid claims error rate includes all allowed line items and excludes items that the Carrier/DMERC/FI did not pay, had no resolution for, or returned to the provider (RTP). The CERT contractor used the following formula for this rate:

$$\frac{\$ \text{ Overpaid} - \$ \text{ Underpaid}}{\text{Total } \$ \text{ Allowed}}$$

Example: A claim contains three lines. A carrier allows $30 for the claim: $10 for each line. The CERT contractor determines that the carrier should have allowed $25 for the entire claim, i.e., $0 for line 1, $10 for line 2, and $15 for line 3.

Using the information presented above, the rate is calculated as follows: the carrier overpaid line 1 by $10 ($10 - $0), allowed line 2 correctly, and underpaid line 3 by $5 ($10 - $5); therefore, the carrier allowed $5 in error, i.e. the $10 overpayment for line 1 minus the $5 underpayment for line 3. The carrier allowed a total of $30 for the claim. Therefore, the rate is calculated as follows

$$\frac{\$10 - \$5}{\$30} = \frac{\$ 5}{\$30} = 16.67\%$$

CALCULATION OF PAID CLAIMS ERROR RATE				
	LINE 1	LINE 2	LINE 3	TOTAL
WHAT THE CARRIER/DMERC/FI ALLOWED	$10	$10	$10	$30
WHAT THE CERT CONTRACTOR SAID THE CARRIER/DMERC/FI SHOULD HAVE ALLOWED	$0	$10	$15	$25
DOLLARS IN ERROR	$10	$0	(-$5)	$5
TOTAL DOLLARS IN ERROR	$5 (TOTAL FOR DOLLARS IN ERROR)			
TOTAL DOLLARS THE CARRIER/DMERC/FI ALLOWED	$30			
PAID CLAIMS ERROR RATE	$5/$30=16.67%			

The paid claims error rate for the claim is 17 percent.

Provider Compliance Error Rate Formula

The provider compliance error rate includes all line items except those that had no resolution, RTPs, and those denied for non-medical reasons. Therefore, all O and V line items are included in this calculation.

The CERT contractor used the following formula for this rate:

$$\frac{\text{Fee schedule Amount of Code(s) Billed} - \text{Total \$ That the Carrier/DMERC/FI Should Have Allowed}}{\text{Total \$ That the Carrier/DMERC/FI Should Have Allowed}}$$

Example: A claim contains three lines. The provider submits a claim for $60: $40 for line 1, $10 for line 2, and $10 for line 3. The Carrier/DMERC/FI allows $30 for the claim: $10 for each line. The CERT contractor determines that the Carrier/DMERC/FI should have allowed $25 for the entire claim, i.e., $0 for line 1, $10 for line 2, and $15 for line 3. The CERT contractor also determines that the Medicare fee schedule amount for the codes as billed is $30: $10 for line 1, $10 for line 2, and $10 for line 3.

Using the information presented above, the rate is calculated as follows: the provider submitted a claim for services that would be allowed $30 based on the Medicare fee schedule: $10 for line 1, $10 for line 2, and $10 for line 3. The CERT contractor determined that the Carrier/DMERC/FI should have allowed $25 for the claim: $0 for line 1, $10 for line 2, and $15 for line 3. The calculation of the rate is as follows

$$\frac{\$30 - \$25}{\$25} = \frac{\$5}{\$25} = 20\%$$

CALCULATION OF PROVIDER COMPLIANCE ERROR RATE				
	LINE 1	LINE 2	LINE 3	TOTAL
WHAT THE CARRIER/DMERC/FI ALLOWED	$10	$10	$10	$30
WHAT THE CERT CONTRACTOR SAID THE CARRIER/DMERC/FI SHOULD HAVE ALLOWED	$0	$10	$15	$25
SUBMITTED CHARGES	$40	$10	$10	$60
FEE SCHEDULE AMOUNT FOR CODE(S) BILLED	$10	$10	$10	$30
DOLLARS IN ERROR	$10	$0	(- $5)	$5
TOTAL DOLLARS IN ERROR	$5 (TOTAL FOR DOLLARS IN ERROR)			
TOTAL DOLLARS THAT THE CERT CONTRACTOR SAID THE CARRIER/DMERC/FI SHOULD HAVE ALLOWED	$25			
RATE	$5/$25=20%			

The provider compliance error rate for the claim is 20 percent.

Services Processed Error Rate Formula

The services processed error rate includes all line items except RTP items. It includes all line items for all sample reasons (i.e. O, V, and T) and all line items without resolution. Only RTP line items are excluded from all rate calculations. CERT used the following formula for this rate:

$$\frac{\text{\# Services Overpaid + \# Services Underpaid}}{\text{Total \# Services Processed}}$$

Example: A claim contains three lines. A Carrier/DMERC/FI allows $30 for the claim: $10 for each line. The CERT contractor determines that the Carrier/DMERC/FI should have allowed $25 for the entire claim, i.e., $0 for line 1, $10 for line 2, and $15 for line 3. The services processed error rate for the claim is 67 percent.

Using the information presented above, the rate is calculated as follows: the contractor overpaid the one service on line 1, paid the one service on line 2 correctly, and underpaid the one service on line 3; therefore, the contractor paid 2 services incorrectly, i.e. they underpaid the one service on line 3 plus they overpaid the one service for line 1. The contractor paid two services inappropriately. There were three lines with one service on each line for the claim. Therefore, the rate is calculated as follows

$$\frac{\text{1 service overpaid +1 service underpaid}}{\text{3 services processed}} = \frac{2}{3} = 66.67\%$$

CALCULATION OF SERVICES PROCESSED ERROR RATE				
	LINE 1	LINE 2	LINE 3	TOTAL
WHAT THE CARRIER/DMERC/FI ALLOWED	$10	$10	$10	$30
WHAT THE CERT CONTRACTOR SAID THE CARRIER/DMERC/FI SHOULD HAVE ALLOWED	$0	$10	$15	$25
# SERVICES ON CLAIM	1	1	1	3
# SERVICES IN ERROR	1	0	1	2
TOTAL # SERVICES IN ERROR	2 (TOTAL FOR SERVICES IN ERROR)			
TOTAL # SERVICES ALLOWED	3			
CLAIMS PROCESSED ERROR RATE	2/3=66.7%			

Table 13: Line Items Included in each Error Rate Calculation

Error Category	Paid Line Items (O, V*)	Unpaid Line Items (V**)	Denied For Non-Medical Reasons (T)	Automated Medical Review Denials (T)	No Resolution	RTP
Paid Claim	Included	Excluded	Excluded	Excluded	Excluded	Excluded
Provider Compliance	Included	Included	Excluded	Included	Excluded	Excluded
Services Processed	Included	Included	Included	Included	Included	Excluded

* These V line items went through medical review and the Carrier subsequently approved them for payment.

** These V line items went through medical review and the Carrier subsequently denied them for payment.

Error Counting

When the CERT contractor requested medical records from the provider and received no response, the CERT contractor counted it as an error. When the medical documentation submitted did not support the service identified on the claim, the CERT contractor also counted that as an error. The CERT contractor notified the Carrier/DMERC/FI of all errors. The Carrier/DMERC/FI determined the dollar value of the error and communicated the dollar value to the CERT contractor. If an error involved a bundled payment (e.g., SNF, PPS), and the FI found that the error had no impact on the final payment, the FI notified the CERT contractor who then removed the error. In cases where the error did not have an impact on the final payment amount, the error was excluded from all error rate calculations.

Use of Weights in CERT Analysis

When creating global Carrier/DMERC/FI error rates, it was necessary to project the total dollars in error and total dollars allowed in a calendar year for each contractor. To do this, the CERT contractor weighted each claim's dollars in error and amount allowed by the inverse of the sampling frequency, which was also the probability of being sampled. For Carriers/DMERCs sampled the entire year, the sampling frequency was the number of claims sampled divided by the number of claims in the universe for that Carrier/DMERC, in that calendar year. In fact, the CERT contractor set the skip factor in the systematic sample to collect roughly 2,200 claims per contractor in a calendar year.

Statistical Techniques

CMS' national paid claims error rate calculation used a bottom up approach. The building blocks of the national paid claims error rate were the individual rates calculated at the Carrier/DMERC/FI level. For each Carrier cluster and DMERC contractor, the CERT contractor calculated a paid claims error rate based on approximately 2,000 claims, and for each FI cluster, the CERT contractor calculated a paid claims error rate based on approximately 1,000 claims. The CERT contractor calculated the national paid claims error rate by aggregating all the Carrier/DMERC/FI paid claims error rates to produce a national paid claims error rate.

The CERT contractor used a ratio estimation procedure to establish error rates. That is; within each individual Carrier group, DMERC, and FI group; the CERT contractor summed the paid claims error rate in the sample and divided by the allowed charge in the sample. This was dollar denominated. For example, if a Carrier made an error allowance of $10 out of a $100 actual total allowance, it represented a paid claims error rate of 10 percent ($10 / $100).

The CERT contractor aggregated Carrier/DMERC/FI specific error rates by contractor type (e.g. Carrier/DMERC/FI). The CERT contractor weighted individual Carrier/DMERC/FI error rates by the proportion of claims each contractor received during the period of inference to total claims all Carrier/DMERC/FI received. Thus, the national paid claims error rate reflects claims submission proportionate to the size of the Carrier/DMERC/FI. The CERT contractor weighted the standard error of the contractor type error rate (Carriers and DMERCs only) proportionate to the standard error of an individual contractor. Thus, the national standard error for a contractor type accounted for each contractor error proportionate to the volume of claims submitted to each contactor.

Carrier/DMERC/FI paid claims error rates were aggregated into a CERT national paid claims error rate. The proportion of individual claims that each Carrier/DMERC/FI received to total claims that all contractors received determined the weight of each contractor in the national paid claims error rate. The CERT contractor based the standard error of the national error rate on an aggregation weighted by the number of claims included in the individual component variances. Standard errors for the error rate could not be obtained in a straightforward manner due to the complexity of the ratio estimation procedure. However, confidence intervals were constructed using standard errors provided by a Taylor approximation, which is accurate for large sample sizes.

In instances where claims were sampled for less than a year, such as with FI claims, there was no difference in the calculation of the sampling frequency, and in turn the sampling weight. The sampling frequency again was the claims sampled divided by the universe number of claims for the *entire calendar year*. Technically, one could argue that the sampling frequency of claims outside the

sampling period but within the calendar year was zero, and hence the only sampling frequency that can be used is one that divides the number of claims sampled by the number of universe claims in the sampling period. In the case of FI claims, where only seven months of claims were sampled, this would only allow the CERT contractor to project errors and allowed amounts for seven months, making it impossible to join estimates for less than twelve months with the yearly estimates.

It was true that the probability of sampling a claim outside of the sampling period while still in the calendar year was zero. If we assumed that the rate of allowed amounts, errors in allowed amounts, and subsequent error rates were constant throughout the year, then the denominator of the sampling frequency could have been the calendar year universe number of claims. This holds true because any claim sampled was also representative of a claim outside the sampling period. *These assumptions are implicit in any inference for the entire year that is made from claims drawn only from a fraction of the year.* Please note that the most palatable of these assumptions was that the error rate remained constant outside the sampling period. There was no reason to believe that people made relatively more errors at different times of the year. Moreover, we captured the fact that more claims may have been processed in some months of the year compared to others simply by including all claims over the year in the denominator of the sampling frequency. However, if the average dollar amount per claim changed systematically over the year, we would not have captured this without sampling over the entire year.

In conclusion, using the calendar year universe number of claims in calculation of the sampling frequency was reasonable under a set of assumptions. These assumptions were that the error rates remained constant throughout the year and the average dollar amount per claim remained constant over the sampling year. These assumptions would have been implicit from any inference drawn from sampling part of a year to project for the entire year.

Methods for Different Treatments of Non-Response

The CERT contractor denied sampled claims that the Carrier/DMERC/FI paid but for which providers did not respond, when the CERT contractor requested documentation. The CERT contractor labeled those no documentation claims "non-response errors" in the 2003 Improper Payments Report. There are two ways of treating non-response errors when calculating an error rate: calculate an error rate that includes non-response errors in the rate or calculate one that removes data for claims with no documentation from the rate. This discussion addresses methods of excluding non-response errors from an error rate.

Error Rate if Non-Response Errors are Excluded

When the CERT contractor excluded claims with no documentation from an estimate, they excluded the amount paid for the claim from both the total dollars

in error and total payments. Thus, both the numerator and denominator of an error rate that excludes no documentation claims are smaller than when the CERT contractor included no documentation claims in the rate. For the rate with non-response errors excluded, it is as if the claim with non-response errors did not exist. Please note that the dollars in error due to no documentation are equal to the total paid for claims with no documentation; the CERT contractor penalized claims with no documentation for the full amount the FI/carrier/DMERC paid.

The HPMP did not calculate a paid claims error rate excluding claims with no documentation for Inpatient PPS. Furthermore, HPMP did not determine the amount FIs paid for claims with no documentation. However, because HPMP penalizes all no documentation claims the full amount paid, it is possible to construct a paid claims rate excluding claims with no documentation for Inpatient PPS. In the HPMP results, claims in error due to technical denials are equivalent to the CERT and the OIG term no documentation claims; the CERT contractor projects that HPMP had $216 million in no documentation claims during the year. Additionally, the total amount paid for Inpatient PPS claims during the year is $80.4 billion and the projected total dollars in error is $2.8 billion. To create an error rate excluding no documentation for HPMP, the CERT contractor subtracted dollars in error due to no documentation from both total projected errors and total known payments (shown below):

$$\frac{\text{Total Projected Error Payments w/o Payments for "No Documentation" Errors}}{\text{Total Projected Payments w/o Payments for Claims with "No Documentation" Errors}} =$$

$$\frac{\text{Total Projected \$ in Error - Total Projected \$ for "No Documentation" Errors}}{\text{Total Known Payments - Total Projected \$ for "No Documentation" Errors}} =$$

$$\frac{\$2.8 \text{ billion} - \$.2 \text{ billion}}{\$80.4 \text{ billion} - \$.2\text{billion}} = 3.26\%$$

The CERT contractor used the Part A inpatient PPS rate of 3.3 % in conjunction with the Part B, DMERC, and "Part A excluding inpatient" rates to arrive at a national error rate excluding claims with no documentation. The CERT contractor weighted the error rates for the four rates using payments after co-payments, deductibles, and adjustments to recover pervious overpayment for each type of provider as weights; the CERT contractor used the same procedure for the national paid claims rate including claims with no documentation (see Table 1). The CERT contractor calculated the national error rate excluding claims with no documentation as follows:

$$\frac{\$56.5 * 7.33\% + \$7.4 * 9.16\% + \$52.0 * 3.85\% + \$83.9 * 3.26\%}{\$199.9} = \frac{\$9.6}{\$199.9} = 4.78\%$$

Table 1. Distribution of National Error Rates by Type of Contractor

Contractor	Part B	DMERC	Part A excluding PPS	PPS	Total
1. Payments	$56,568,647,953	$7,392,968,972	$52,029,467,916	$83,900,260,582	$199,891,345,423
2. Error rate excluding claims with no documentation	7.33%	9.16%	3.85%	3.26%	**Calculated above (4.78%)**
3. Dollars in error (row 1 times row 2)	$4,146,481,894.95	$677,195,957.84	$2,003,134,514.77	$2,735,148,494.97	$9,561,960,862.53

Error Rate if Non-Response Errors Assumed to be Similar to the Historic OIG Levels

The most important difference between the OIG error rate for 2002, which was 6.3 percent, and the CERT error rate for 2003, which was 9.8 percent, is non-response errors. Of the 9.8 percentage points in the CERT 2003 error rate, 5.36 percentage points are due to denials that result from non-response, while only an average of 1.08 percentage points of the OIG error rate, between 1996 and 2002, is due to non-response denials. To illustrate this point, the CERT contractor estimated an adjusted error rate—the CERT 2003 error rate that CMS would have observed if the denial rate due to non-response (no documentation) were equal to the average OIG rate.

Overview. In words, the CERT contractor substituted the average OIG error rate due to non-response, 1.08 percentage points, for the CERT 2003 portion of the error rate due to non-response, 5.36 percentage points. Then, they took the difference between the two (5.36%-1.08%=4.28%). The CERT contractor assumed that the difference consisted of two components: claims in error and claims not in error. They estimated the portion of claims in error based on the 2003 CERT error rate excluding non-response errors. The CERT contractor then distributed those errors to the other error categories (insufficient documentation, medical necessity, etc.) in proportion to the average frequencies observed by the OIG between 1996 and 2202. This resulted in an adjusted CERT error rate of 5.84 percent.

Detail. Below are the detailed step-by-step calculations. The first step is to estimate the error rates for the specific types of error in previous years. The CERT contractor obtained the information on the rates from OIG reports. For this calculation, the CERT contractor used the dollars in error by error type and total payments (Table 2). Note that the table also includes the 2003 CERT values because the breakdown will be needed later in this explanation. The CERT contractor determined the rates by error type based on the total dollars in error due to each error type divided by total payments (Table 3), as shown below:

$$\text{Error Type Specific Error Rate} = \frac{\text{Total Dollars in Error of a Certain Type}}{\text{Total Dollars Paid}}$$

Table 2. OIG Historical Dollars in Error By Category and Total Payments for Each Year from OIG Response

	1996	1997	1998	1999	2000	2001	2002
Non-response Errors	$3.25	$3.79	$0.71	$0.98	$2.05	$1.50	$1.13
Insufficient Documentation Errors	$7.60	$5.20	$1.40	$4.47	$2.28	$3.68	$2.68
Medically Unnecessary Errors	$8.53	$7.48	$6.98	$4.43	$5.11	$5.20	$7.61
Coding Errors	$1.98	$2.98	$2.26	$2.13	$1.74	$2.04	$1.90
Other Errors	$1.84	$0.83	$1.21	$1.49	$0.70	($0.37)	$0
Total Payments	$168.6	$177.4	$176.1	$169.5	$173.6	$191.8	$212.7

Table 3. Error Type Specific Error Rates From Table 2

	1996	1997	1998	1999	2000	2001	2002
Non-response	1.93%	2.14%	0.40%	0.58%	1.18%	0.78%	0.53%
Insufficient Documentation	4.51%	2.93	0.80%	2.64%	1.31%	1.92%	1.26%
Medically Unnecessary	5.06%	4.22%	3.96%	2.61%	2.94%	2.71%	3.58%
Coding	1.17%	1.68%	1.28	1.26%	1.00%	1.06%	0.89%
Other	1.09%	0.47%	0.69%	0.88%	0.40%	(-0.19%)	0.00%

CERT also calculated the 2003 rates for error types, but due to the fact that Part B, DMERC, and "Part A excluding HPMP" are payments gross of co-payments, deductibles, and adjustments for previous overpayments, they used an alternative method (see Table 4). The CERT contractor estimated the error rate for each type of error by multiplying the 2003 CERT error rate by the share of errors due to that error type. This resulted in a CERT Error Rate due to non-response for 2003 of 5.36 percent.

Table 4. Computation Of 2003 Error Type Specific Error Rates

	Non-response	Insufficient Documentation	Medically Unnecessary	Coding	Other
Share of Errors	54.70%	25.90%	11.30%	6.70%	1.40%
CERT Error Rate	9.80%	9.80%	9.80%	9.80%	9.80%
Error Type Specific Error Rate	5.36%	2.54%	1.11%	0.66%	0.14%

The next step is to average each of these specific error type rates across the years of 1996 to 2002 (See Table 5). In assuming the non-response error rate to be similar to historic levels, The CERT contractor substituted the historic value of 1.08 percent for 5.36 percent.

Table 5. Computations For 2003 Adjusted Error Rate

	(1)Average Error Type Specific Error Rate From OIG, 1996-2002	(2)Remainder Of Non-Response Error Rate To Allocate After Substituting Historical OIG Non-Response Rate	(3)Marginal Error Rate to Be Added To Each Documentation Error Rate, (2)*(1)	(4)2003 Error Rates For Categories With Documentation	2003 Adjusted Error Type Specific Error Rates, (3) + (4)
Non-response	1.08%	N/A	N/A	N/A	1.08%
Insufficient Documentation	2.20%	4.28%	0.09%	2.54%	2.63%
Medically Unnecessary	3.59%	4.28%	0.16%	1.11%	1.27%
Coding	1.20%	4.28%	0.05%	0.66%	0.71%
Other	0.47%	4.28%	0.02%	0.14%	0.16%

The CERT contractor allocated a proportion (1.08%) of the 2003 non-response error rate to non-response using historical OIG levels. However, that did not address the remainder of the non-response error rate, 4.28 percent (i.e., 5.36% - 1.08%). The CERT contractor allocated the 4.28 percent of the dollars into two categories: not an error and an error with a response. Now the question is what is the error rate of these remaining non-responses if the CERT contractor had received documentation? The CERT contractor assumed the remaining 4.28 percent followed historical OIG specific error type rates for the categories for which the CERT contractor received documentation. Table 4 gives these rates in the first row. They are the result of CERT contractor's averaging the error type rates from 1996 to 2002 (see Table 3). Finally, the CERT contractor multiplied the specific error type rates (excluding non-response) by the remainder of non response percentage, 4.28 percent, to determine the marginal amounts of error that they needed to add to the 2003 specific error type rates (See Table 5). Please note that what was left of the 4.28 percent after assigning error is the percent of the 4.28 percent paid correctly.

The CERT contractor summed the adjusted 2003 rates for error types to obtain the 2003 "error rate if the non-response error rate is similar to historic OIG levels". The following is the "addition" that results when the CERT contractor substituted the1.08 percent for the 2003 CERT estimate of 5.36 percent (the estimate for claims that are denied due to non-response to documentation requests) and distributed the reduction in the non response error based on the average historical error rate over the other error categories in proportion to the current levels. That results in an error rate is 5.84 percent, see below:

1.08% (No documentation) + 2.63% (Insufficient documentation) + 1.27% (Medically unnecessary) + .71% (Coding) + .16% (Other) = 5.84%

Additionally, the CERT contractor estimated the total dollars in error if they used the historic OIG non-response error rates. To obtain this value, they multiply the error rate of 5.84% by the total payments after co-payments, deductibles, and adjustments for previous overpayments ($199.9 billion) and determined a value of $11.6 billion in error.

Appendix D – Differences Between CERT Methodology and OIG Methodology

Table 14 summarizes the differences between the CERT and OIG methodologies.

Table 14: OIG and CERT

	OIG	CERT
Sample Size	6,000 claims	2003: 120,000 claims 2004+: 150,000 claims
Types of Error Rates	1 type: - Paid claims error rate	3 types: - Paid claims error rate - Provider compliance error rate - Services processed error rate
Level of Detail	National	- National - Contractor-specific - Service-type - Provider-type
Reviewers	Carriers/DMERCs/FIs	CERT contractor for Carriers/DMERCs/FIs; QIOs for QIOs
Follow-up to Obtain Records	Up to 4 letters and 3 calls; In-person visits if necessary	Up to 4 letters and no calls; no in-person visits

For the past seven years, the Department of Health and Human Services, Office of Inspector General (OIG) conducted an annual audit of the Fee-For-Service Medicare program to determine the extent to which the Medicare program was paying claims correctly. Because the OIG's claim sample size was small, the OIG was only able to produce a single rate each year – the National Medicare Paid Claims Error Rate.

In 2001, the OIG and CMS decided to move the responsibility for developing Medicare claims error rates to CMS. CMS tasked the Comprehensive Error Rate Testing (CERT) Program with determining the percentage of Medicare payments that were made where the claim was not billed in accordance with Medicare's coverage, coding, and billing rules.

One can summarize the differences between the OIG error rate versus CERT error rate by comparing four different categories – sample design including the sampling unit, audit procedure, the estimator and standard error calculated to

project national error rates, and other estimates referred to in these error rate calculations.

The first difference between the two error rates is the difference in sampling the unit. The sampling unit for the OIG error rate calculation is the beneficiary. The CERT contractor produces an error rate using a submitted claim to an Affiliated Contractor (AC) as the sampling unit. The sample design for each error rate is also different. The sample design is a multi-stage stratified design for the OIG. Stage I consists of 12 AC quarters. In this first stage of the sample design, a probability sample is selected from the universe of all AC quarters in a 12-month period. Stage II draws a random sample of 50 beneficiaries for each AC quarter. The sample is stratified based on placing beneficiaries in four payment strata.

The sample design for the CERT contractor error rate is based on a systematic random sample for each contractor type. For contractor J, CERT determines the number of claims to be audited represented by the symbol n_j. CERT makes an estimate of the number of claims expected to flow into the contractor's system over the 12-month period of the audit. This estimate is represented by symbol N_j. The skip interval is calculated by dividing the sample size into total claims to reach a skip interval (represent by k_j). A random start is generated by randomly selecting a number between 1 and k. From the random starting point, every k_j submitted claim is selected. These differences are summarized in Table 15.

Table 15: The OIG and CERT Error Rate Sampling Methodology

OIG Error Rate	CERT Error Rate
Sampling unit – *beneficiary*	Sampling unit – *submitted claim*
Sampling design – *multistage stratified*	Sampling design – *systematic random sample by contractor type*
Stage I – *all AC quarters in a 12-month period*	– *Sample skip interval for claim submission during 12 month period*
Stage II – *random sample of 50 beneficiaries by 4 payment strata*	– *Sampling ratio* – Random start

There are also differences in the audit procedure for these two error rates. The OIG audit is beneficiary based as well as based on a Medicare contractor's payment quarter and audits three months of beneficiary claims. The CERT contractor error rate audits a sampled claim but the audit includes all claim lines. For the OIG audit, Medicare contractor's staff does the medical review. The CERT audit is performed by CERT staff, which is independent from the Medicare contractor's staff. The OIG audit includes all claim types paid by the AC for the beneficiary in the audit quarter. Where the OIG audit looks at only paid claims, the CERT audit is done by contractor type (i.e., DMERC, Part B clustered by contractor and processing system type, and Part A non –DRG). The CERT contractor audit looks at paid claims where the AC performed a complex or manual review (V claims), paid claims not subjected to any review (O claims), and denied claims based on AC automated edits (T claims). The OIG audit accounts for the deductibles but the CERT contractor *may not* account for deductibles. Table 16 summarizes the differences in audit procedures.

Table 16: OIG and CERT Audit Procedures

OIG Audit Procedure	CERT Audit Procedure
– Three months of beneficiary claims – AC staff – All claim types – Only paid claims – Accounts for deductibles	– Single claim – all claim lines – CERT staff – Contractor type – V, T, O – May not account for deductibles

The method of making an estimate for a national error rate also differs between the OIG and CERT contractor. Overpayment accounts for relative probability of selection of contractor quarters and beneficiaries are the estimates for the OIG calculation. The CERT calculation starts by estimating an error rate for each AC type. The overpayment estimate is first aggregated by contractor type, weighted by proportion of payment. The OIG error rate uses a variable appraisal program to estimate improper payments to total population of Medicare payments. The CERT contractor error rate makes a final estimate of a national error rate based on the aggregate of contractor type weighted by payments by Part A, Part B, and DMERC. The OIG uses a difference estimator to calculate a national error rate and the CERT method uses a ratio estimator. The differences in estimator calculations are summarized in Table 17.

Table 17: OIG versus CERT Differences in Estimator Calculation

OIG	CERT
Overpayment estimate accounts for relative probability of selection of contractor quarters and beneficiaries	Overpayment estimate first aggregated by contractor type weighted by proportion of payment
Variable appraisal program to estimate improper payments to total population	Final estimate based on aggregate of Contractor type weighted by payments by Part A, Part B, DMERC etc.
Difference Estimator and Standard Error	Ratio Estimator and Standard Error

For simplicity, this graphic compares the formula for contractor j using a difference estimator on your left and a ratio estimator on your right. The OIG error rate is based on a difference estimator and the CERT contractor error rate is based on a ratio estimator. In the OIG error rate, only the numerator is an estimate. In the CERT error rate, both the numerator and the denominator are estimates. Remember the "n" in each formula represents a different sampling unit. For the OIG n= beneficiaries and for CERT n= claims. Lastly, to be sure there is consistency, the Lewin Group (the CERT subcontractor for statistical analysis), uses both methods to check consistency and validity for the CERT estimate.

The OIG and CERT Error Rate Difference in the Ratio Estimator

$$\hat{R}_{2j} = \frac{\sum_{i=1}^{n_j} \frac{N_j}{n_j} E_{ij}}{P_{Tj}} \qquad \hat{R}_{1j} = \frac{\sum_{i=1}^{n_j} E_{ij}}{\sum_{i=1}^{n_j} P_{ij}}$$

OIG CERT

The last difference between the OIG and the CERT contractor audit is that the OIG only estimates a national error rate. .CERT calculates a national error rate and other error rates. The CERT audit also calculates a processing error rate and provider compliance error rate.

The provider compliance error rate is a dollar-weighted rate, similar to the paid claims compliance rate, and includes all claims that were paid or denied by the Contractor. It does not include claims that were rejected for technical reason by automated systems. The provider compliance error rate uses the charge before any reduction or denial is made by a Medicare Contractor to compute the rate. The graphic below demonstrates the mathematical formula for the Provider Compliance Error Rate.

Provider Compliance Error Rate Formula

$$\frac{\sum_{AllClaims}\left(Amount\_Submitted - CERT\_Determination\right)}{\sum_{All\_Claims} Amount\_Submitted}$$

The processing error rate is the non-dollar weighted error rate for all claims sampled for any AC. Unlike the paid error rate, claims that are not paid are also included. Here, all claims that are incorrectly processed are counted as error represented mathematically as one. This is different from the error rate formula where errors are dollar weighted. Processing error rates include inappropriate payments made by the contractor in rejecting line items for technical reasons, for incorrectly reducing or denying line items, or for paying line items inappropriately. The graphic below displays the mathematical formula for this calculation.

Processing Error Rate Formula

$$\frac{\sum_{AllClaims}\left(Incorrectly\_processed\_claims\right)}{\sum_{All\_Claims} All\_Submitted\_claims}$$

Appendix E – HPMP Methodology

In this report the HPMP randomly sampled 57,775 discharges for which Quality Improvement Organizations (QIOs) have final review authority.

CMS used its two Clinical Data Abstract Centers (CDACs) to perform HPMP review. The CDACS obtained and abstracted medical records for claims in the HPMP sample.

Quality control for the sample was evaluated on an ongoing basis through internal (intra-CDAC) and between (inter-CDAC) quality control activities. To determine intra-CDAC reliability, two reviewers at the same CDAC abstracted a random sample of 30 records and the results were compared. Statistics were calculated for completeness, reliability, and accuracy. The resulting statistics were reported to CMS on a monthly basis. The CDACs also conducted separate internal quality control activities.

CMS determined inter-CDAC reliability by having a reviewer at each CDAC abstract a random sample of 30 records and then having CMS compare the results. This activity was geared to assess the reliability of abstraction between CDACs. Only a limited number of variables were evaluated. The resulting statistics were reported to CMS monthly.

For both determinations, Kappa values were calculated to provide a statistical measure of inter-rater reliability by comparing the observed versus the expected frequency (based on chance alone) of agreement.

Sampling Methodology

Each month, a CMS contractor sampled from a tap file from the National Claims History (NCH) database. The tap file has several purposes. It was made up of a group of inpatient records selected according to certain specifications. The Information Services Group (ISG) at CMS used the file to generate the HPMP sample. It was also used to provide data to the QIOs to update the Health Service Encounter (HSE) tables that the QIOs used for their review activities. For the HPMP sample, records were selected according to discharge date. For any month's sample, records from four months prior were selected. The delay allowed time for submission and posting delays. The file came through in a "version I" format.

The programs to obtain the sampling population and then the HPMP sample from the NCH tap file were run so that the sample could be loaded by the 25th of each month.

Each month, two text files were generated and submitted to HPMP. The first file contained a state level summary of claims and reimbursements. The second file contained NCH data for each claim in the sample. These files were used for calculation of error rates.

Disposition of the Sample Claims/Line Items

HPMP sampled the claims from a copy of the NCH database.

Each month, each CDAC:

- Uploaded beneficiary and discharge information provided by CMS;
- Generates letters to the appropriate provider(s) requesting the medical record;
- Upon receipt of the record, labeled the record for identification by sample reason; and
- Sent the record to the abstractor for abstraction and screening.

Records not received within 30 days of request were identified as cancelled in the HPMP system and referred to the QIO. These records were processed as technical denials.

A technical denial is the denial of payment for Medicare services based upon a provider's failure to submit sufficient documentation of the service; i.e., the provider failed to provide the medical record or a necessary portion of the medical record. Documentation errors could also be issued prior to a technical denial, for example, when the record was illegible, or certain information was missing. The QIO did receive some of these records, thus CDAC-abstracted clinical data may not have been available for all QIO reviewed records.

Specific data elements were abstracted from each medical record received. The records were also screened for admission necessity and DRG coding. Maryland records were reviewed for length of stay (Maryland is the only waived, non-PPS state).

CDAC nurse reviewers used certain modules of the InterQual criteria to screen for admission necessity. Admission review is the review of a medical record to determine that an episode of care was medically necessary, reasonable, and in the correct setting for the procedure or diagnosis and condition of the patient. In

admission review, a non-physician reviewer using criteria established or selected by the QIO initially reviewed the case. QIOs are required to establish written criteria or obtain national criteria (e.g. InterQual) for non-physician reviewers to use when screening cases for physician review. The criteria must meet the requirements of §4510 of the QIO manual, but otherwise, the QIOs have the discretion to choose or develop the criteria of their choice.

Qualified coding specialists performed DRG Coding validation screening at the CDAC. The purpose of DRG validation is to insure that diagnostic and procedural information and the discharge status of the patient, as coded and reported by the hospital on its claim, matches both the attending physician's description and the information contained in the patient's medical record. The process involved reviewing the medical record to verify the accuracy of the hospitals ICD-9-CM coding of all diagnoses and procedures that affect the DRG. DRG review cases went through the same levels of review as an admission review. The only difference is the focus of review. DRG Validation Review can result in a DRG change that affects payment amount.

All records that failed CDAC screening were forwarded to the QIO for case review. QIOs were the final arbiter for payment error in the surveillance sample.

There are seven possible forward reasons. The reasons are:

- Medical necessity;
- DRG validation;
- Clinical issue review;
- Quality of care;
- False negative sub-sample (10% sample of non-forwarded reviews);
- Inability to process; and
- Length of Stay (applies only to MD).

CDACs were required to forward to the QIOs 10 percent per state (by random sample) of “non-failed" records. This 10 percent sub-sample is a quality control mechanism to evaluate the false negative rate of the CDACs.
Cases that failed the CDAC screening, plus the 10 percent sub-sample, were forwarded to the appropriate QIO for case review.

Case Review is the medical review process that a QIO uses to review the medical record of an individual case. Case review involves a detailed review of an individual's medical records for a specific hospitalization, treatment, etc. The primary types of case review pertinent to payment error are medical necessity admission review and DRG validation.

If a QIO physician determined that the hospitalization was not appropriate, the case became a confirmed payment error and a notification was sent to the appropriate FI for payment adjustment.

If the QIO physician or non-physician reviewer determined that the hospitalization was appropriate, then there was no payment error based on unnecessary admission and no payment adjustment was required. Cases referred to the QIO for DRG validation were also reviewed for admission necessity. The QIO may have found that, in addition to or instead of the DRG error, there was an unnecessary admission. For purposes of the HPMP, the payment error based on the unnecessary admission takes precedence over the DRG error. Notification was sent to the appropriate FI for payment adjustment when hospitalization was not appropriate.

In some cases, DRG changes did NOT affect the payment amount. We did not classify these cases as payment errors per se, as we counted dollars in error. If the case also passed admission review with no DRG error amount, we did not count any errors against the case.

Cases did not require further action if the QIO determined that there was no DRG change, the admission was approved, and there were no other adverse determinations (i.e., billing error or quality concern).

Operational Definitions for the Paid Claim Error Rate

Billing errors are problems identified in how a claim was filled out when submitted for payment. Billing errors can occur in a medical record for a number of different reasons. The QIO currently uses 20 different types of billing errors. Only certain ones affect payment, and of those, five were included in payment error identification. The billing errors included in payment error identification are described in Table 18.

Table 18: Billing Errors that Affect Payment

Error Number	Description
3	Exempt unit - the stay was billed as a non-exempt unit, but was an exempt unit;
17	Outpatient care billed as inpatient - the case was billed as an inpatient, but was delivered outpatient
18	Incorrect discharge disposition - the stay was billed as a discharge, but the patient was transferred to another PPS hospital
19	Incorrect discharge disposition - the stay was billed as a discharge, the patient was transferred to a non-PPS hospital or unit, SNF, or home health and the discharge was after 10/1/1999 for 10 transfer DRGs (014, 113, 209, 210, 211, 236, 263, 264, 429, 483)
20	20 HMO (Health Maintenance Organization) bill incorrectly paid under PPS.

Statistical Techniques

HPMP used a ratio estimation procedure to establish error rates. That is, within each individual state or jurisdiction, the paid claims error rate was the sum of errors in the sample divided by the payments in the sample. In the general case, this was dollar denominated. For example, an error payment of $10 out of the $100 actual total payment is congruent with a paid claims error rate of 10 percent ($10 / $100). This was the same approach used by the CERT contractor.

Individual state/jurisdiction error rates were weighted by the proportion of payments made during the period of inference for each state/jurisdiction. Thus, the national error rate reflects claims submission proportionate to the size of the state or jurisdiction. So too, the national standard error for a contractor type accounts for each state or jurisdiction error proportionate to the volume of claims submitted to each state/jurisdiction.

Payment error rates were estimated from the results of QIO case review of HPMP records forwarded from the CDAC. Specifically the error rate was calculated using the following steps:

1. Records used to calculate the error rate were selected and written to temporary data sets.

2. The 10 percent screening reliability sample was analyzed. This analysis determined which records were in error for admission denials, DRG coding inaccuracy, billing errors, technical denials, and length of stay concerns specific to Maryland (MD). None of this information was incorporated into the payment error rate; however, univariate procedures were performed to determine the significance of errors in this sub-sample by state, CDAC, and nationally.

3. An analysis was performed on the remaining part of the sample (this analysis excluded the 10 percent screening sample). This third part of the analysis involved data analysis of records that failed screening by the CDAC and were forwarded to the QIO. Records with review information were analyzed for billing errors. All records that were confirmed errors by the QIO in these areas were used to calculate the dollar amounts in error.

4. The payment error rate and variance was calculated. This involved examination of all collected data for confirmed errors and determined the error types and hierarchy for assigning dollars in error. This hierarchy assigned priority to admission denials over DRG changes on records where both categories appeared to be confirmed errors. An estimate of the payment error rate was produced for each state jurisdiction and a weighted estimate for the nation. A variance was also calculated for each state and a weighted estimate for the nation.

Appendix F – Error Codes

Table 19: Error Code Report Category Mapping

Error Category	Code	Description
Medically Unnecessary Services		
1	25	Medically Unnecessary Service or Treatment
1	65	Utilization
Non-Response		
2	15	Non-Response Due to Extenuating Circumstances
2	16	Non-Response
2	41	Services Billed were Not Rendered
Incorrect Coding		
3	31	Services Incorrectly Coded
3	40	Service Provided by Someone other than Billing Provider
3	60	Unbundling
Other		
4	35	No Benefit Category/Statutory/Unallowable Service
4	45	Duplicate Payment
4	55	MSP Error
4	80, 90	Other Audit Error Codes
Insufficient Documentation		
5	21	Insufficient Documentation

Appendix G – Contractor Groupings

Carrier Groups
AdminaStar IN/KY 00630/00660
BCBS AR AR/MO 00520/00523
BCBS AR OK/LA/NM 00521/00522/00528
BCBS KS/NE/Kansas City 00650/00655/00651**
BCBS MT 00751
BCBS RI 00870
BCBS UT 00910
Cahaba AL/GA/MS 00510/00511/00512
CIGNA ID/TN/NC 05130/05440/05535
Empire NY/NJ 00803/00805
First Coast FL 00590
First Coast CT 00591
GHI NY 14330
HealthNow NY 00801
Highmark PA 00865
NHIC CA 31140/31146
NHIC MA/ME/NH/VT 31142/31143/31144/31145
Noridian CO/ND/SD/WY/IA 00824/00820/00825/00826
Noridian AZ/HI/NV/AK/OR/WA 00832/00833/00834/ 00831/00835/00836
Palmetto SC 00880
Palmetto OH/WV******* 00883
SSS PR/VI 00973/00974
Trailblazer TX 00900
Trailblazer MD/DE/DC/VA 00901/00902/00903/00904
WPS WI/IL/MI/MN 00951/00952/00953/00954

DMERC Groups
Tricenturion* Region A 77011
AdminaStar Federal Region B 00635
Palmetto Region C 00885
CIGNA Region D 05655

* As a "Full PSC", Tricenturion is tasked with all MR and anti-fraud work in Region A. As such, it is Tricenturion (the PSC) not HealthNow (the Affiliated Contractor) that is responsible for lowering the error rates in this region.

FI Groups
Anthem IN/IL/KY/OH 00130/00131/00160/00332/
Anthem ME/MA 00180/00181
Anthem NH/VT 00270
BCBS AL 00010
BCBS AL IA/SD 00011
BCBS AR 00020
BCBS AZ 00030
BCBS FL 00090
BCBS GA 00101
BCBS KS 00150
BCBS MS/LA/MO 00230/00231/00232
BCBS MT 00250
BCBS NC 00382
BCBS NE 00260
BCBS RI 00370
BCBS SC 00380
BCBS WY 00460
Carefirst MD/DC 00190/00191
Cooperativa PR 57400
Empire NY/CT/DE 00308
Group Health OK 00340
Highmark PA 00363
Mutual of Omaha (all states) 52280
Noridian MN/ND 00320/00321
Premera WA/AK 00430
Medicare Northwest ID/OR/UT 00350/00410
Riverbend TN/NJ 00390
Trailblazer TX/CO/NM 00400
UGS CA/HI/NV/AS/GU/N Mrns 00454
UGS MI/WI 00450/00452
UGS VA/WV 00453