U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Medicaid Payment Error Rate Measurement Final Report

Fiscal Year 2008

CMS
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1 Executive Summary

1.1 Background

This report contains the national error rate for Medicaid, as well as the fee-for-service (FFS), managed care, and eligibility components for fiscal year (FY) 2008 measured for the Payment Error Rate Measurement (PERM) program. The Children's Health Insurance Program (CHIP) error rate is not included in this report.[1] These error rates are based on the review of FY 2008 claims for Medicaid payments for 17 states selected for the FY 2008 measurement cycle.

The Improper Payments Information Act (IPIA) of 2002 requires the heads of federal agencies, including the Department of Health and Human Services (DHHS), to review annually programs that it administers, to identify programs that may be susceptible to significant improper payments, to estimate the amount of improper payments, to submit those estimates to Congress, and to submit a report on actions the agency is taking to reduce the improper payments. The IPIA directed the Office of Management and Budget (OMB) to provide implementation guidance. OMB defines "significant erroneous payments" as "annual erroneous payments in the program exceeding both 2.5 percent of program payments and $10 million."[2] The Medicaid and CHIP programs were identified as programs at risk for significant erroneous payments.

While the federal government, as the primary funder of the Medicaid program, has responsibility for interpreting and implementing federal Medicaid statute and ensuring that federal funds are appropriately spent—including measuring improper payments—the program is administered at the state level and states have considerable flexibility in designing and operating their programs. After 40 years of program expansion and innovation, states now differ widely in how their programs are structured and financed, the extent to which program administration remains centralized in the Single State Agency or is delegated to other state agencies, the level of sophistication and integration of management information systems, and the degree to which Medicaid is used as the platform for health reform and innovation. The net result is that while Medicaid is a single program at the federal level, at the state level it is 51 different, complex programs. Measurement of improper payments, while a critical activity due to the size and scope of the program is correspondingly difficult and efforts to reduce improper payments require cooperation from both the federal government and the individual states.

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[1] From the CHIPRA legislation, "Notwithstanding parts 431 and 457 of title 42, Code of Federal Regulations (as in effect on the date of enactment of this Act), the Secretary shall not calculate or publish any national or State-specific error rate based on the application of the payment error rate measurement (in this section referred to as ''PERM'') requirements to CHIP until after the date that is 6 months after the date on which a new final rule (in this section referred to as the ''new final rule'') promulgated after the date of the enactment of this Act and implementing such requirements in accordance with the requirements of subsection (c) is in effect for all States." For this reason, CMS has not calculated nor included the CHIP error rate in this report.

[2] OMB M-06-23, Appendix C to OMB Circular A-123, August 10, 2006.

In FY 2006, CMS implemented the PERM methodology to estimate improper payments in the fee-for-service Medicaid program and comply with the reporting requirements of the IPIA. In FY 2007, CMS expanded the methodology to measure the accuracy of Medicaid managed care payments, CHIP fee-for-service and managed care payments, and Medicaid and CHIP eligibility decisions. The methodology is designed to provide an unbiased estimate of the error rates in each of these program components at the state and national levels. To balance the need for a national-level estimate of improper payments with the substantial variation in state programs, CMS designed the PERM methodology to support consistent sampling and review of claims and capitation payments and eligibility decisions across a subset of states each year, taking into account the local policies and procedures by which states make payment and eligibility decisions. While the PERM methodology is first and foremost a measurement methodology, CMS tracks and reports errors by type to inform corrective actions that states can take to reduce improper payments.

At the conclusion of the FY 2008 cycle, CMS has now measured improper payments in Medicaid in every state. Error data from the first three cycles reveals (or confirms) certain findings:

- State Medicaid claims processing systems appear to make most individual payments accurately, with very few data processing errors detected in any of the first three PERM cycles. Many of the data processing errors identified were pricing errors, where the amount paid was different from the amount that should have been paid, but the claim itself was not in error. Most other data processing errors are due to non-covered service errors where the service is not covered by Medicaid or the provider is not registered or licensed according to regulation.
- While the PERM error rates consider both underpayments and overpayments as "improper," that is, the absolute value of underpayments is counted in the error rate and they do not offset overpayments, underpayments account for a substantially smaller proportion of payment errors than overpayments, averaging less than 10 percent of projected dollars in error each year. States also do not appear to be systematically denying claims improperly.
- States make vastly fewer errors processing managed care payments than fee-for-service payments, with managed care error rates under three percent in the two PERM cycles where CMS measured managed care. (This would be expected, as the number of payees for managed care is smaller—typically a few health plans versus thousands of individual providers for FFS—and the types of payments made are less varied—typically a few dozen all-inclusive rates for managed care, versus individual fees for thousands of different services and procedures in FFS.)
- Eligibility errors contribute significantly to the Medicaid payment error rate. In FY 2008, the eligibility error rate exceeded 6 percent and accounted for the majority of the overall Medicaid error rate. (In FY 2007, eligibility contributed less to the Medicaid error rate but was the most significant component of the national CHIP error rate.) Eligibility errors

include both errors due to beneficiaries who are receiving services but are not eligible and beneficiaries for whom states are not able to definitively determine eligibility.

Despite the consistent patterns above, across states and across cycles, there are significant differences in payment error rates. This occurs at the component level (FY 2008 FFS component error rates ranging from 0.44% to 7.45% and FY 2008 eligibility component error rates ranging from 0.04% to 19.98%), and at the program level (FY 2008 Medicaid error rates ranging from 0.59% to 20.84%).

CMS attributes the variation across states to multiple factors related to differences in how states implement and administer their programs. For example, states with proportionately larger managed care programs are likely to have lower overall error rates, as error rates for managed care are consistently lower than error rates for the FFS component. In some cases, policy and operational differences among states may affect the degree to which states and providers can obtain documentation to validate payments and eligibility decisions. States that have simplified eligibility documentation rules through use of self-declaration and passive renewal may find that it is harder to obtain necessary documentation for PERM reviews, leading to more undetermined cases that are treated as errors for PERM.

It is important to note that while PERM measures these differences, the PERM findings should be considered in the context of other policy goals and operational realities. Important next steps for CMS and the states will be identifying the drivers of these differences at the state and federal levels, working to reduce improper payments at the state level, and further refining the PERM methodology to ensure that allowable differences in state policies and administration are not contributing to inappropriate differences in error rates.

1.2 FY 2008 Findings

The PERM program uses a 17-state three-year rotation for measuring improper payments in Medicaid, so that CMS measures each state once every three years (see Appendix A for more detail). The states selected for review in the FY 2008 measurement cycle are listed in Table 1. The FY 2008 error rate is the result of claims reviewed from these 17 selected states. Note that in FY 2008, all states measured had a Medicaid FFS program, but only 12 had a Medicaid managed care program. Managed care payments reviewed under the PERM program are capitated payments paid on a per member per month basis for all beneficiaries enrolled, regardless of provision of services.

Table 1 State Selection for FY 2008 Measurement

FY 2008	Alaska, Arizona, District of Columbia, Florida, Hawaii, Indiana, Iowa, Louisiana, Maine, Mississippi, Montana, Nevada, New York, Oregon, South Dakota, Texas, Washington.

The estimated FY 2008 national Medicaid payment error rate is **8.71** percent, with a confidence interval of +/- **2.45** percentage points at the 90 percent confidence level.

- The total dollar amount projected to be in error estimated from this national error rate is **$28.7 billion ($28,719,584,963)**.
- The federal share of the total dollar amount projected to be in error is **$16.4 billion ($16,394,004,526)**.

CMS expects to recover the federal share on a claim-by-claim basis from the overpayments found in error within the FY 2008 sample. Within the PERM process, the only funds that can be recovered are from claims that were actually sampled and then were empirically found to have contained improper payments resulting in overpayments. Therefore, these sampled and reviewed improper overpayments that are subject to recovery are a small fraction of the total amount projected to be in error for the nation for each PERM cycle.

Table 2 presents summary information on the results of the FY 2008 PERM cycle. The table shows sample sizes, national error rates, and the 90 percent upper and lower confidence limits for the total Medicaid program and separately for Medicaid FFS, Medicaid managed care, and Medicaid eligibility and combined results of the FY 2007 and FY 2008 measurement.

Table 2 National Medicaid Program Payment Error Rate

ERROR RATE	SAMPLE SIZE	NATIONAL PAYMENT ERROR RATE ESTIMATE[1]	LOWER CONFIDENCE LIMIT (90%)	UPPER CONFIDENCE LIMIT (90%)
FY 2008 TOTAL MEDICAID	21,183[2]	8.71%	6.26%	11.15%
FY 2008 MEDICAID FFS	9,182	2.62%	1.59%	3.66%
FY 2008 MEDICAID MANAGED CARE	3,340	0.10%	-0.02%	0.21%
FY 2008 MEDICAID ELIGIBILITY	8,661	6.74%	4.37%	9.11%
TWO YEAR AVERAGE MEDICAID	-	9.57%	7.74%	11.40%

[1] The national estimate is comprised of the sum of the FFS, managed care, and eligibility components minus a small adjustment to account for the overlap between the claims and eligibility review functions.
[2] The FY 2008 total Medicaid sample size is comprised of 9,182 FFS line items, 3,340 managed care capitation payments, and 8.661 active eligibility cases.

Table 2 highlights the following findings:

- The Medicaid FFS estimated error rate for FY 2008 is 2.62%.
- The Medicaid managed care estimated error rate is 0.10% and is statistically indistinguishable from zero, as seen from the negative lower confidence limit. The

Medicaid managed care program returned very few errors for the FY 2008 PERM cycle, i.e., 31 claims from a total sample size of 3340 claims.

- The Medicaid eligibility component has an estimated error rate for FY 2008 of 6.74%.

In addition, since FY 2008 is the second year that CMS calculated error rates for all components (the FFS component, managed care component, eligibility component) of the Medicaid program, CMS also calculated a two-year weighted average national error rate across the two years, FY 2007 and FY 2008. This two-year average national Medicaid error rate is 9.6 percent. The two-year national error rate is the weighted average error rate across the FY 2007 and FY 2008 measurement cycles. It is the average error rate for the two years, adjusted for FY 2008 having a higher estimated total national payment amount than for FY 2007.

Table 3 presents the results for the estimated dollars paid in error by the Medicaid program for FY 2008. The table shows the total amounts paid and the estimated amounts paid in error overall and for overpayments and underpayments.

Table 3 National Medicaid Program Projected Dollars in Error

MEDICAID PROGRAM	TOTAL CLAIMS PAID	ESTIMATED DOLLARS IN ERROR[1]
TOTAL MEDICAID	$329,846,419,257	$28,719,584,963
MEDICAID FFS	$262,644,709,313	$6,893,584,365
MEDICAID MANAGED CARE	$67,201,709,944	$65,791,718
MEDICAID ELIGIBILITY	$329,846,419,257	$22,229,219,578
OVERPAYMENTS	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR[1]**
TOTAL MEDICAID	$329,846,419,257	$27,932,255,471
MEDICAID FFS	$262,644,709,313	$6,290,604,099
MEDICAID MANAGED CARE	$67,201,709,944	$64,976,274
MEDICAID ELIGIBILITY	$329,846,419,257	$22,000,589,089
UNDERPAYMENTS	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR[1]**
TOTAL MEDICAID	$329,846,419,257	$832,007,682
MEDICAID FFS	$262,644,709,313	$602,980,265
MEDICAID MANAGED CARE	$67,201,709,944	$815,444
MEDICAID ELIGIBILITY	$329,846,419,257	$228,630,488

[1] The total dollars in error will always be slightly less than the sum of the FFS, managed care, and eligibility dollars in error. The reason is that the total dollars in error are reduced by the small overlap between the claims and eligibility review functions.

Table 3 shows several of the prominent findings for FY 2008.

- The estimated total dollar amount projected to be in error estimated is **$28.7 billion ($28,719,584,963)** which has an estimated federal share in error of **$16.4 billion ($16,394,004,526)**.
- Overpayments are significantly more than underpayments. The estimated Medicaid overpayments were **$27.9 billion ($27,932,255,471)**, whereas the estimated Medicaid underpayments were **$0.8 billion ($832,007,682)**.

1.3 Next Steps

CMS has now completed the measurement of Medicaid payment error in all states and identified many clear patterns in terms of program integrity, but also revealed a surprising amount of variation among the states. As noted in the overview, there are substantial differences in the administration of Medicaid programs at the state level, some of which may contribute to differing levels of payment error. This variation also contributes to differing levels of ability to comply with the requirements of the PERM measurement itself.

We continue to believe that the PERM methodology, which estimates payment error rates at both the state and national level, is a valuable tool to identify systemic vulnerabilities and inform potential correction actions. Our primary goal for the next three measurement cycles (during which all states will be reviewed a second time) is to reduce the overall error rate, as well as to reduce measurement (not programmatic) variation among states. To accomplish this, a critical next step for CMS and the states will be to identify root causes of error at the state level and implement appropriate corrective actions in order to reduce errors. The other important effort is for CMS, working with the states and its contractors, to reduce measurement variation by identifying refinements to the national PERM methodology to ensure that improper payments are measured as precisely and consistently as possible.

Corrective Action

CMS structured the PERM methodology to produce an unbiased estimate of the error rate through review of a small, random sample of claims. CMS has identified three broad classifications of errors during PERM review: state errors (data processing review errors and certain eligibility errors), provider errors (most medical review errors), and client errors (certain eligibility errors), each of which is driven by different root causes. The PERM process identifies and classifies types of errors, but states must conduct root cause analysis to identify why the errors occur, a necessary precursor to effective corrective action. Thus, states are the critical actors during the corrective action phase of the PERM cycle.

CMS intends the corrective action process to support the identification and implementation of cost-effective approaches to reduce error, which will be state-specific given the substantial variations in medical policies, documentation requirements, eligibility rules, and processing systems across states. CMS will work closely with the individual FY 2008 states to review their

error rates, determine the root causes of the errors, and develop corrective actions to address the major causes of error.

States will focus efforts on major causes of error where CMS and the state can identify clear patterns. For example, several states have found that particular provider types, such as pharmacies or long-term care facilities, repeatedly fail to comply with documentation requirements, and may find that a targeted corrective action for these providers is cost-effective and likely to reduce future improper payments. States may also place first priority on errors that are wholly within their control (e.g., pricing and logic errors in the processing system, eligibility errors), then on provider or client errors with clear patterns where education or clarification is likely to result in improvement (e.g., a dozen medical review policy errors due to lack of provider signatures, five pharmacy errors from missing original scripts), and finally on idiosyncratic provider errors (which may include many of the high dollar no documentation and insufficient documentation errors) that can only be addressed through individual provider follow-ups and general provider education. States will identify appropriate corrective actions, as well as implementation and monitoring approaches, and develop and submit formal Corrective Action Plans (CAP) to CMS.

The PERM process also identifies systematic vulnerabilities that do not necessarily result in a PERM errors. For example, PERM has revealed that several states do not retain copies of the eligibility information used to determine capitation payments, so it is impossible to fully audit the accuracy of those payments. As an additional program corrective action, CMS has begun cataloging these types of systematic vulnerabilities as they arise and formed a State Systems Workgroup to address state systems problems that may cause payment errors. The Workgroup includes representatives from the Office of Financial Management (which administers PERM), the Center for Medicaid and State Operations, the appropriate CMS Regional Office, and the appropriate state.

PERM Methodology Refinements

As noted throughout this Executive Summary, PERM is designed to allow a consistent and unbiased measurement of payment error across 51 disparate state-level Medicaid programs. It is important that the reported PERM error rates be as accurate as possible; that is, the rates should exclude as many false positives (claims reported as correct that are actually in error) and false negatives (claims reported as errors that are actually correct) as possible. Over the first three cycles, CMS and its contractors have worked to identify policies and practices that may contribute to false positives and false negatives, and have developed alternatives or changes to the methodology to reduce the impact of these on the overall error rate.

For example, in the FY 2006 and FY 2007 cycles, most FFS medical review errors (in terms of both dollars in error and number of errors) resulted from providers failing to submit the necessary documentation to support the claims. It is possible that some or even all of these claims were accurate, but CMS and its contractors could not verify their validity in the absence of sufficient documentation so PERM considers these complete errors. In FY 2008, the PERM documentation contractor made increased efforts to reach out to providers and obtain medical

records for reviews. In addition, most FY 2008 states—with knowledge of the impact these errors had on FY 2006 and FY 2007 states' error rates—put significant effort into educating providers, tracking medical record submission progress, and assisting in collecting records. These combined efforts substantially reduced the number of no documentation and insufficient documentation errors from 1,066 in FY 2006 to 133 in FY 2008.

CMS is also developing PERM refinements aimed to reduce the state burden and align PERM data collection more closely with other CMS program integrity data collection processes. Over the past year CMS developed and pilot tested a new, streamlined methodology to collect data required for PERM. The new methodology transfers much of the PERM data burden to PERM contractors where CMS holds the contractor, not the state, responsible for taking "raw" claims data and developing a universe for sampling that complies with the PERM instructions. If implemented, this approach will also position CMS to integrate PERM data collection with other emerging CMS program integrity initiatives. CMS will continue to work with states to address the challenges of multiple claims sources, financial administrators (e.g. counties) with more rudimentary IT systems, and aggregate payments.

Through the proposed PERM rulemaking in response to CHIPRA, CMS has offered a number of additional program refinements, many of which are designed to strengthen the validity of the measurement and reduce the degree to which the measurement itself affects error rates. Over the next cycles, CMS will continue to work with the states to reduce improper payments and improve the efficiency and utility of the measurement.

2 PERM Program Overview

2.1 Background

The purpose of the PERM program is to produce a national level error rate for the Medicaid and CHIP programs in order to comply with the requirements of the IPIA of 2002. The law defines improper payments as: (a) any payment that should not have been made or that was made in an incorrect amount, including both overpayments and underpayments, under statutory, contractual, administrative, or other legally applicable requirements; and (b) payments made to an ineligible beneficiary, any duplicate payments, payments for services not received, and any payment that does not account for credit for applicable discounts.

CMS developed a three-year, 17-state, rotational approach for review of the Medicaid program payments under PERM. Under the 17-state rotation, each state will be measured once every three years. In determining the state selection, CMS grouped all states into three equal strata of small, medium and large based on the states' FY 2006 available FFS annual expenditure data. The largest stratum was further subdivided into the nine largest states and the next largest eight states. CMS selected states from each stratum for each year of the three year cycle, until all 50 states and the District of Columbia were selected for review over each three-year cycle. The stratification ensured that approximately equal numbers of large, medium and small states were included each year, beyond what might have been chosen through a truly random selection.

The FY 2008 measurement cycle represents the third year of the PERM program. For the FY 2006 measurement cycle, only Medicaid FFS reviews were conducted. For the FY 2007 measurement, in addition to Medicaid FFS reviews, managed care and eligibility reviews were also conducted for Medicaid and CHIP. For FY 2008, Medicaid is included in this report. An FY 2008 CHIP error rate is not included in this report, as Section 601 of the Children's Health Insurance Program Reauthorization Act (CHIPRA) of 2009 prohibits CMS from calculating or publishing any national or State-specific error rates for CHIP until six months after a new PERM final rule is in effect. CMS is currently developing a final regulation as required by CHIPRA. Therefore, for FY 2008, CMS is not reporting a national CHIP error rate.

Table 4 presents the results from FY 2006, FY 2007, and FY 2008 for the Medicaid payment error rates.

Table 4 Medicaid Payment Error Rates for FY 2006, FY 2007, and FY 2008

Component	FY 2006	FY 2007[1]	FY 2008[1]
Medicaid Error Rate		10.5%	8.7%
FFS Error Rate	4.7%	8.9%	2.6%
Managed Care Error Rate		3.1%	0.1%
Eligibility Error Rate		2.9%	6.7%

[1] The national estimate is comprised of the sum of the FFS, managed care, and eligibility components minus a small adjustment to account for the overlap between the claims and eligibility review functions.

Table 4 shows that the estimated overall, FFS, and managed care error rates appeared to decline between FY 2007 and FY 2008, with only the eligibility component posting an apparent increase in its error rate. Part of this apparent change is due to changes in the PERM regulations that were designed to mitigate the effect of the PERM processes on the estimated error rates. Nonetheless, the apparent eligibility error rate shows an over doubling in size from FY 2007 to FY 2008. Part of this apparent increase and the apparent decreases for FFS and managed care are also likely to be due to differences between the states chosen in each PERM cycle.

2.2 Universe Determination for FY 2008

For Medicaid, the PERM error rate consists of three components: a FFS error rate, a managed care error rate, and an eligibility error rate. While all states have an eligibility error rate, the determination of the FFS and/or managed care error rate is dependent upon whether the state has FFS, managed care, or both components as part of their program.

CMS collected universe data for the FFS and managed care components of Medicaid from the selected states for the FY 2008 measurement. From this universe data, CMS drew a random sample of line items from the universe data, reviewed the items in the sample, determined errors, and calculated error rates. For the eligibility component, the states sampled cases and reviewed cases from their universes, according to the instructions provided by CMS.

The FFS universe component of the Medicaid error rate consists of all claims and line items within claims that were: (1) paid or denied between October 1, 2007 and September 30, 2008; and (2) eligible for federal financial participation under Title XIX (Medicaid). FFS universe data were collected quarterly.

The managed care universe component of the Medicaid error rate consists of all managed care payments made on behalf of beneficiaries between October 1, 2007 and September 30, 2008 and for which there was federal financial participation under Title XIX. Managed care universe data were collected quarterly.

The eligibility component universe for Medicaid consists of all cases under the Medicaid program for each month between October 1, 2007 and September 30, 2008 for which an eligibility determination was made. Exclusions of certain cases apply and are outlined in the eligibility review guidance documentation. The universe is separated into an active universe, consisting of cases that are enrolled in the program, and a negative universe, consisting of cases for which eligibility was denied or terminated. The active universe is further stratified by new applications, re-determinations, and all other cases.

2.3 Statistical Sampling

The sampling process for the FFS and managed care components of PERM follows a stratified two-stage design. First, all 50 states plus the District of Columbia were stratified into three strata of 17 states each based on historical total Medicaid FFS expenditures (see Appendix B for more detail). This sampling of states constitutes the first stage of the sample. Within each sampled

state, the universe of claims was stratified into ten strata determined by the payment size. In addition, an eleventh stratum, consisting of Medicare premium payments paid by Medicaid, is included in FFS. Claim line items, in the case of FFS, or payments, in the case of managed care, were then sampled from these strata. The sampled FFS items were subjected to medical and data processing reviews to identify proper and improper payments, while the sampled managed care payments were subjected only to data processing review because the payments were made for a benefit package rather than a specific service.

2.3.1 FFS and Managed Care Sample Size

In FY 2008, the sample size was approximately 130 'claims' each fiscal quarter for each Medicaid FFS program, totaling 540 per state (including Medicare Premium Payment samples). For the Medicaid managed care programs, the sample consisted of 70 'claims' each fiscal quarter for 280 per state. The managed care sample size is smaller than the FFS sample size because the error rate is generally considerably lower in managed care than in FFS, plus there is generally lower variability across managed care payments. Both of these factors allow for smaller samples.

2.3.2 Eligibility Sample Size

CMS chose to use a "case based" sample for the eligibility component instead of the claims-based sample used for the FFS and managed care components. The sample consisted of the individual beneficiaries as active and negative 'cases'. Active cases are cases containing information on a beneficiary who is enrolled in the Medicaid program in the month that eligibility is reviewed. Negative cases are cases containing information on a beneficiary who applied for benefits and was denied or whose program benefits were terminated based on the state agency's eligibility determination.

Three strata were defined for active cases: new applications (stratum one), re-determinations (stratum two), and all other cases (stratum three). The applications stratum contains all cases in the sample in which the state took action to grant eligibility in the sample month based on a completed application. The re-determinations stratum contains cases in which the state took action to continue eligibility in the sample month. The all other cases stratum contains cases that are on the program in the sample month and do not meet the applications or re-determinations strata criteria.

Detailed eligibility review guidelines were released to states early enough in FY 2008 for states to begin the eligibility measurement in the first quarter of the fiscal year. An equal number of case are sampled monthly from the annual sample size of 504 active cases and 204 negative cases.

There were 14 cases sampled from each stratum of active cases in each of the twelve months of the FY 2008 eligibility cycle. A total of 204 cases were sampled from the negative case universe, 17 cases for each of the twelve months. The sample sizes for both the active and negative case universe were calculated to achieve precision in the error rate estimate at the state level of +/- 3 percentage points with a 95 percent confidence level. As was done before, CMS continued the assumption that the underlying eligibility error rates would be less than five percent in each state.

In subsequent years, if a state's actual error rate is substantively lower, the state may demonstrate that a smaller sample size based on the documented lower error rate would be sufficient.

2.3.3 Payment Error Rate Formula

Sampled claims or cases are subject to reviews and an error rate is calculated based on those reviews. A payment error rate is an estimate of the proportion of improper payments made in the Medicaid program to the total payments made.

The national error rate was computed using a separate ratio estimator, which combines the error rates from each state stratum using the expenditures for the state strata. The error rates for the state strata were calculated using a combined ratio estimator that accounts for the two sampling stages in the design. This method projects the improper payments and total payments using the sampling frequency of units from the state as well as the sampling frequency of states from the state's stratum. State level error rates were computed using a combined ratio estimator as well, although two stage sampling adjustments are not needed. State and national rates are calculated for each program component—FFS, managed care and eligibility—and are also combined into an overall rate, representing the total error rates for the program at the state and at the national levels. (See Appendix C for more detail regarding the eligibility error rate.)

2.3.4 State Level Statistics

For the calculation of state level statistics, the error rate estimator is a combined ratio estimator. The numerator consists of estimated dollars in error in the universe and the denominator is estimated total payments, both projected from the sample. The sample is drawn from a universe that is divided into the strata relevant to that universe, as described above. The sample dollars in error and sample payments are weighted by the inverse of the strata sampling frequencies to estimate universe values. The sampling frequencies, which are the rates at which items were sampled, vary by stratum. (See Appendix B for more detail regarding the statistical formulae.)

2.3.5 National Level Statistics

To calculate the national error rate based on the individual state error rates, two steps are taken. First, states are divided into four strata based on the size of the states' Medicaid FFS program. For each of the strata, there are some states that were sampled, and some that were not. In this step, the error rate for the entire state stratum is projected from the error rates of the states that are sampled in the stratum. The method is analogous to the method for the estimated state level error rates. Then, the national rate is estimated by adding rates across the state strata, but is weighted by the proportion of total expenditures represented by each state stratum.

2.4 Review Methods

Medicaid FFS claims were subjected to data processing review and, if applicable, medical review. Medicaid managed care claims were subjected only to data processing review. If an error was identified during medical review or data processing review, states were given the

opportunity to request a difference resolution. Medicaid eligibility claims were reviewed by states.

2.4.1 Medical Review Methodology

From a state's quarterly sample selection, detailed information on each sampled claim was requested from the state and copies of the relevant medical records were requested from the providers. The medical records were used to perform medical reviews on the claims to validate whether the claim was paid correctly. Each claim was assessed to determine the following:

- Adherence to states' guidelines and policies related to the service type;
- Completeness of medical record documentation to substantiate the claim;
- Medical necessity of the service provided;
- Validation that the service was provided as ordered and billed; and
- Claim was correctly coded.

A medical review error is a payment error that is determined from a review of the medical documentation submitted, the relevant state policies, and a comparison to the information presented on the claim. The medical reviews consisted of reviewing sampled FFS claims for the errors listed in Table 5.

Table 5 Medical Review Errors

Error Code	Error	Definition
MR1	No documentation	The provider did not respond to the request for records within the required timeframe.
MR2	Insufficient documentation	The provider did not return information requested or did not submit sufficient documentation for the reviewer to determine whether the claim should have been paid.
MR3	Procedure coding error	The provider performed a procedure but billed using an incorrect procedure code.
MR4	Diagnosis coding error	The provider billed using an incorrect diagnosis.
MR5	Unbundling	The provider billed for the separate components of a procedure code when only one inclusive procedure code should have been billed.
MR6	Number of unit(s) error	The provider billed for an incorrect number of units for a particular service billed.
MR7	Medically unnecessary service	The provider billed for a service determined to have been medically unnecessary based upon the information regarding the patient's condition in the medical record.
MR8	Policy violation	Either the provider billed and was paid for a service that was not in agreement with state policy, or the provider billed and was not paid for a service that, according to state policy, should have been paid.
MR9	Administrative/other	A payment error was discovered during a medical review but was not a MR1 – MR8. The specific nature of the error is recorded.

2.4.2 Data Processing Review Methodology

Data processing reviews were also conducted to validate that each sampled claim was processed correctly based on information found in the state's claims processing system when it was adjudicated compared with the following:

- State specific policies and fee schedules in effect at the time of payment;
- Beneficiary enrollment; and
- Provider participation in the Medicaid program.

A data processing error is a payment error resulting in an overpayment or underpayment that could be avoided through the state's Medicaid Management Information System (MMIS) or other payment system. Claims not processed through a state's MMIS were subject to validation through a paper audit trail, state summary or other proof of payment. The data processing reviews consisted of reviewing the sampled claims for the errors listed in Table 6.

Table 6 Data Processing Errors

Error Code	Error	Definition
DP1	Duplicate item	An exact duplicate of the sampling unit was paid.
DP2	Non-covered service	State policies indicate that the service is not payable by Medicaid under the state plan or for the coverage category under which the person is eligible.
DP3	FFS claim for a managed care service	The beneficiary is enrolled in a managed care plan and the managed care plan should have covered the service rather than paid under FFS.
DP4	Third-party liability	A third-party insurer is liable for all or part of the payment.
DP5	Pricing error	Payment for the service does not correspond with the pricing schedule for that service.
DP6	Logic edit	A system edit was not in place based on policy or a system edit was in place but was not working correctly and the sampling unit was paid (e.g., incompatibility between gender and procedure, or ineligible beneficiary or provider).
DP7	Data entry error	Clerical error in the data entry of the sampling unit.
DP8	Rate cell error	The beneficiary was enrolled in managed care and payment was made, but for the wrong rate cell.
DP9	Managed care payment error	The beneficiary was enrolled in managed care, but was assigned the wrong payment amount.
DP10	Administrative/other	A payment error was discovered during a data processing review but the error was not a DP1 – DP9 error. The specific nature of the error is recorded.

2.4.3 Difference Resolution

If an error was identified that affected payment, the state was notified and given an opportunity to review the documentation associated with the payment and dispute the error finding with the exception of errors due to "no documentation." An independent difference resolution review was

performed to consider the state's information and make a final determination. If the state determined additional review was necessary, the state could then appeal the error finding to CMS with the exception of errors where the difference in finding was less than $100.

Errors that were not challenged by the states, not eligible for difference resolution or appeal, or upheld following the difference resolution and appeal process were included in the error rate calculation. If an error was found in both the data processing review and medical review for a specific claim, the total error amount reported was adjusted to not exceed the total paid amount for the claim.

2.4.4 Eligibility Review Methodology

After the sample was selected for each sample month, state PERM review staff performed eligibility reviews on each sampled case from the active and negative universe. Each active case was reviewed for eligibility as of the last state action. The eligibility reviews verify that the individual was eligible for the Medicaid program according to state and federal eligibility criteria, not whether the state's policies comply with federal law or whether the caseworker acted on cases appropriately. Negative cases were reviewed to verify whether the beneficiary was denied or terminated from the programs correctly or incorrectly.

For each case sampled in the active case universe, claims data were collected for payments made on the behalf of the beneficiary for services received in the sample month and paid in that month and in the four subsequent months. These constitute the payments affected by the eligibility review of the sampled cases. Because states perform the eligibility reviews, there is no difference resolution for eligibility at the federal level.

Upon reviewing a case to verify eligibility, states reported their eligibility and payment findings based on the review finding codes in Table 7 below. Cases can be found eligible, not eligible, undetermined, or eligible but with a payment error (e.g. a portion of the total payments for a reviewed case can be improperly paid while the rest of the payments are made correctly).

Table 7 Eligibility Review Findings

Code	Review Finding	Definition
E	Eligible	An individual beneficiary meets the state's categorical and financial criteria for receipt of benefits under the Medicaid program.
EI	Eligible with ineligible services	An individual beneficiary meets the state's categorical and financial criteria for receipt of benefits under the Medicaid program but was not eligible to receive particular services.
NE	Not eligible	An individual beneficiary is receiving benefits under the program but does not meet the state's categorical and financial criteria for the month eligibility is being verified.
U	Undetermined	A beneficiary case subject to a Medicaid eligibility determination under PERM about which a definitive determination could not be made.
L/O	Liability overstated	The beneficiary paid too much toward his/her liability amount or cost of institutional care and the state paid too little.

Code	Review Finding	Definition
L/U	Liability understated	The beneficiary paid too little towards his/her liability amount or cost of institutional care and the state paid too much.
MCE1	Managed care error, ineligible for managed care	Upon verification of residency and program eligibility, the beneficiary is enrolled in managed care but is not eligible for managed care.
MCE2	Managed care error, eligible for managed care but improperly enrolled	Beneficiary is eligible for both the program and for managed care, but not enrolled in the correct managed care plan as of the month eligibility is being verified.

For purposes of this report, undetermined cases are included in the error counts and improper payments. Findings of undetermined occur when, after due diligence, evidence cannot be obtained to make a definitive determination of eligibility on a case.

2.5 Recoveries

When a sampling unit was identified as an overpayment error, CMS recovers funds from the State for the federal share. Monthly Final Errors for Recoveries Reports list all claims with an overpayment error and is the official notice of recoveries due. A letter from CMS is attached to the report notice sent to states. Recoveries to CMS for the federal share of payments are required within 60 days of receipt of each Final Errors for Recoveries Report.

3 Medicaid Findings

3.1 National Medicaid Payment Error Rate

Table 8 presents the FY 2008 national Medicaid program payment error rate and the projected dollars in error. Further, the table presents both the upper and the lower 90 percent confidence level percentages for each. For the dollars paid in error, the table separately shows the total Medicaid and the federal share of the overpayments, underpayments, and total payments.

Table 8 National Medicaid Program Payment Error Rate and Projected Dollars in Error

	SAMPLE SIZE	NATIONAL PAYMENT ERROR RATE ESTIMATE	LOWER CONFIDENCE LIMIT (90%)	UPPER CONFIDENCE LIMIT (90%)
ERROR RATE	12,522	8.71%	6.26%	11.15%
TOTAL	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
TOTAL MEDICAID	$329,846,419,257	$28,719,584,963	$20,661,859,739	$36,777,310,188
FEDERAL SHARE	$188,286,275,618	$16,394,004,526	$11,794,412,158	$20,993,596,893
OVERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
TOTAL MEDICAID		$27,932,255,471	$19,926,986,109	$35,937,524,833
FEDERAL SHARE		$15,944,573,126	$11,374,924,146	$20,514,222,107
UNDERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
TOTAL MEDICAID		$832,007,682	$111,392,780	$1,552,622,583
FEDERAL SHARE		$474,935,056	$63,586,356	$886,283,757

The estimate of the national error rate is **8.71** percent for the Medicaid program. The estimated total Medicaid dollars in error is approximately **$28.7 billion**, and the federal portion of the dollars in error is approximately **$16.4 billion**. Almost all of the dollars in error are overpayments. Error rates at the state level for Medicaid ranged from **0.59** percent to **20.84** percent.

State error rates can impact the national error rates in a variety of ways. First, size matters. The national error rate reflects the results from relatively large states (e.g., New York, Texas, Florida) more than from relatively small states (e.g., Hawaii, Montana, South Dakota). Second, the

variation of error rates across states, especially across large states, can substantively impact the margin of error. If large states vary greatly in their error rates, the national margin of error will be wider than if they approximated the same error rate.

The national Medicaid error rates for FY 2008 met the IPIA requirement of a precision level of +/- 2.5 percentage points at the 90 percent confidence level. The actual confidence interval for the national Medicaid error rate was +/- **2.44** percentage points at the 90 percent confidence level. For purposes of the measurement and sample sizes, CMS had assumed fairly equivalent payment error rates across states at about seven to eight percent, based on results from the PERM pilot and earlier PERM cycles. The overall error rates and the variation in error rates were approximately as anticipated, thus allowing CMS to meet the IPIA precision requirements. Some states experienced Medicaid FFS error rates over 20 percent while others had rates that were less than 1 percent. The managed care and eligibility components of the Medicaid error rates were within the range anticipated for sample size purposes, and these individual components met the precision requirements for IPIA.

3.1.1 Medicaid FFS Component Payment Error Rate

Table 9 presents the FY 2008 national Medicaid FFS payment error rate and the projected dollars in error. Further, the table presents both the upper and the lower 90 percent confidence level percentages for each. For the dollars paid in error, the table separately shows the total Medicaid and the federal share of the overpayments, underpayments, and total payments.

Table 9 National Medicaid FFS Component Payment Error Rate and Projected Dollars in Error

	SAMPLE SIZE	NATIONAL PAYMENT ERROR RATE ESTIMATE	LOWER CONFIDENCE LIMIT (90%)	UPPER CONFIDENCE LIMIT (90%)
ERROR RATE	9,182	2.62%	1.59%	3.66%
TOTAL	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID FFS	$262,644,709,313	$6,893,584,365	$4,174,545,394	$9,612,623,335
FEDERAL SHARE	$150,113,341,851	$3,971,504,855	$2,478,126,115	$5,464,883,595
OVERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID FFS		$6,290,604,099	$3,458,183,640	$9,123,024,559
FEDERAL SHARE		$3,612,006,130	$2,047,102,247	$5,176,910,013
UNDERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID FFS		$602,980,265	($40,663,027)	$1,246,623,557
FEDERAL SHARE		$359,498,725	($21,583,611)	$740,581,061

The estimate of the national FFS error rate is **2.62** percent for the Medicaid program, with a margin of error of +/- 1.04 percent. The estimated total Medicaid dollars in error is approximately **$6.9 billion** ($6,893,584,365), and the federal portion of the dollars in error is approximately **$3.9 billion** ($3,971,504,855). Almost all of the dollars in error are overpayments. Error rates at the state level for Medicaid FFS range from **0.44** percent to **7.45** percent.

3.1.2 Medicaid Managed Care Component Payment Error Rate

Table 10 presents the FY 2008 national Medicaid managed care payment error rate and the projected dollars in error. Further, the table presents both the upper and the lower 90 percent confidence level percentages for each. For the dollars paid in error, the table separately shows the total Medicaid and the federal share of the overpayments, underpayments, and total payments.

Table 10 National Medicaid Managed Care Component Payment Error Rate and Projected Dollars in Error

	SAMPLE SIZE	NATIONAL PAYMENT ERROR RATE ESTIMATE	LOWER CONFIDENCE INTERVAL (90%)	UPPER CONFIDENCE INTERVAL (90%)
ERROR RATE	3,340	0.10%	-0.02%	0.21%
TOTAL	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID MANAGED CARE	$67,201,709,944	$65,791,718	($11,981,380)	$143,564,816
FEDERAL SHARE	$38,172,933,767	$38,083,148	($6,662,066)	$82,828,361
OVERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID MANAGED CARE		$64,976,274	($12,801,301)	$142,753,848
FEDERAL SHARE		$37,619,473	($7,128,256)	$82,367,202
UNDERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID MANAGED CARE		$815,444	($321,763)	$1,952,652
FEDERAL SHARE		$463,675	($182,960)	$1,110,311

The estimate of the national managed care error rate is **0.10** percent for the Medicaid program, with a margin of error of +/- 0.12 percent. The estimated total Medicaid dollars in error is approximately **$65.8 million** ($65,791,718), and the federal portion of the dollars in error is approximately **$38.1 million** ($38,083,148). Almost all of the dollars in error are overpayments.

Error rates at the state level for Medicaid managed care ranged from **0.00** percent to **0.93** percent. Notably, not a single state exceeded 1.0 percent for a managed care payment error rate.

3.1.3 Medicaid Eligibility Component Payment Error Rate

Table 11 presents the FY 2008 national Medicaid eligibility payment error rate and the projected dollars in error. Further, the table presents both the upper and the lower 90 percent confidence level percentages for each. For the dollars paid in error, the table separately shows the total Medicaid and the federal share of the overpayments, underpayments and total payments.

Table 11 National Medicaid Eligibility Component Payment Error Rate and Projected Dollars in Error

	SAMPLE SIZE	NATIONAL PAYMENT ERROR RATE ESTIMATE	LOWER CONFIDENCE INTERVAL (90%)	UPPER CONFIDENCE INTERVAL (90%)
ERROR RATE	8,661	6.74%	4.37%	9.11%
TOTAL	**TOTAL CLAIMS PAID**	**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID ELIGIBILITY	$329,846,419,257	$22,229,219,578	$14,416,512,840	$30,041,926,316
FEDERAL SHARE	$188,286,275,618	$12,689,108,385	$8,229,379,952	$17,148,836,817
OVERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID ELIGIBILITY		$22,000,589,089	$14,296,392,167	$29,704,786,012
FEDERAL SHARE		$12,558,599,212	$8,160,811,453	$16,956,386,972
UNDERPAYMENTS		**ESTIMATED DOLLARS IN ERROR**	**LOWER CONFIDENCE LIMIT**	**UPPER CONFIDENCE LIMIT**
MEDICAID ELIGIBILITY		$228,630,488	($96,898,959)	$554,159,936
FEDERAL SHARE		$130,509,172	($55,312,846)	$316,331,190

The estimate of the national eligibility error rate is **6.74** percent for the Medicaid program, with a margin of error of +/- 2.37 percent. The estimated total Medicaid dollars in error is approximately **$22.2 billion** ($22,229,219,578), and the federal portion of the dollars in error is approximately **$12.7 billion** ($12,689,108,385). Almost all of the dollars in error are overpayments. Error rates at the state level for Medicaid eligibility ranged from **0.04** percent to **19.98** percent.

3.2 National Error Rate by Type of Error

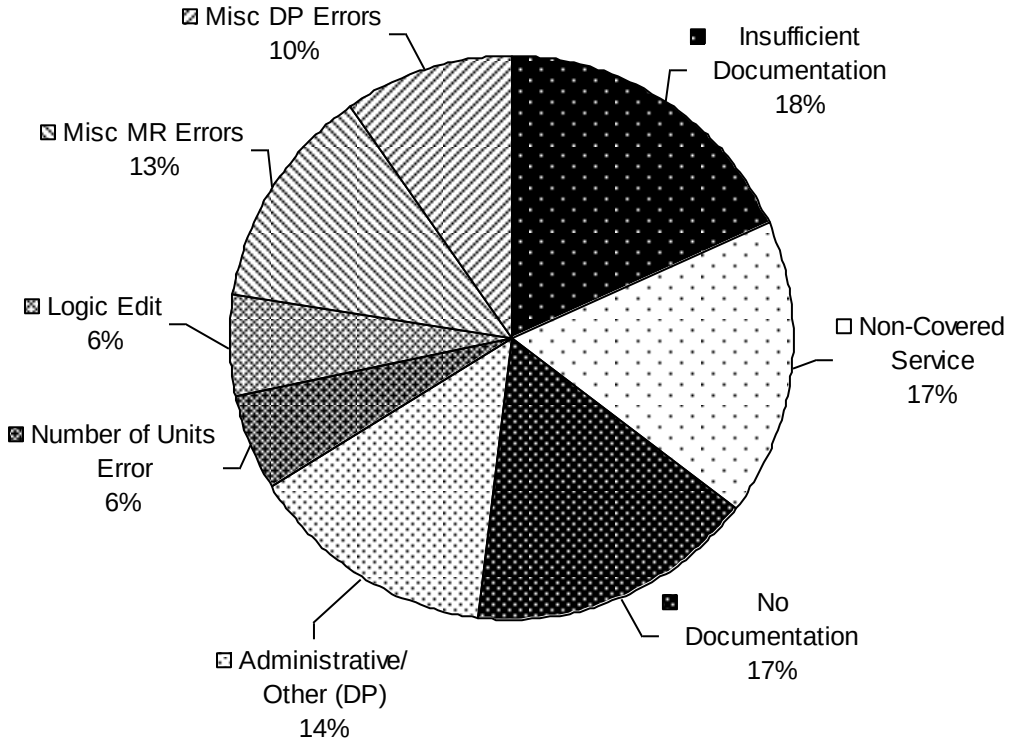
3.2.1 National Medicaid FFS Payment Error Rate Overall by Type of Error

Of the Medicaid FFS payment dollars projected to be in error due to all types of errors found, the following points are noted:

- **"Insufficient Documentation"** errors are the largest source of error (18 percent), followed by
- **"Non-covered Service"** errors (17 percent)
- **"No Documentation"** errors (17 percent), and
- **"Administrative/Other (DP)"** errors (14 percent).

Refer to Figure 1 below.

Figure 1 National Medicaid FFS Payment Error Rate by Type of Error



3.2.2 National Medicaid FFS Payment Error Rate for Medical Record Review by Type of Error[3]

Of the Medicaid FFS payment dollars projected to be in error due to medical record review errors found, the following points are noted:

- "**Insufficient Documentation**" errors are the largest source of errors (34.3 percent), followed by
- "**No Documentation**" errors (31.2 percent)

3.2.3 National Medicaid FFS Payment Error Rate for Data Processing Review by Type of Error[4]

Of the Medicaid FFS payment dollars projected to be in error due to data processing errors found, the following points are noted:

- "**Non-Covered Service**" errors are the largest source of error (36.3 percent), followed by
- "**Administrative/Other (DP)**" errors (30.5 percent)

3.2.4 National Medicaid Managed Care Payment Error Rate by Type of Error

Of the Medicaid managed care payments projected to be in error due to all types of errors, the following points are noted:

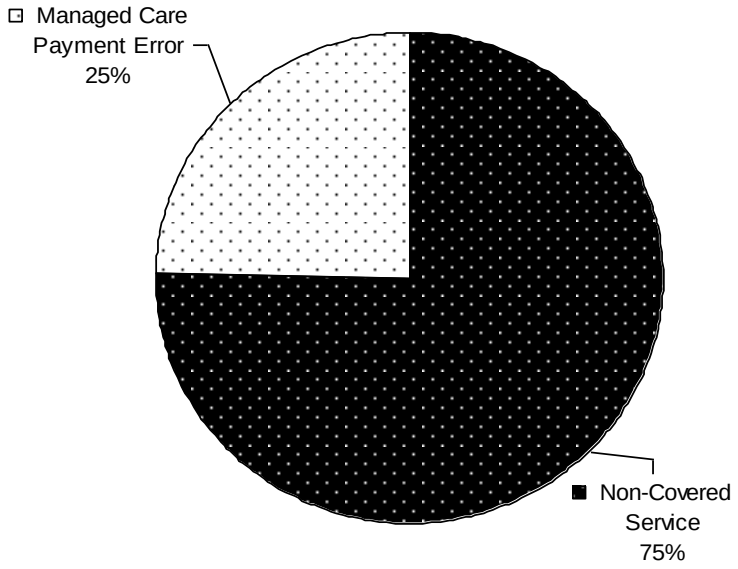
- "**Non-Covered Service**" errors are the largest source of managed care errors (75 percent), followed by
- "**Managed Care Payment**" errors (25 percent)

Refer to Figure 2 below.

[3] The medical record review types of errors cannot be combined with the data processing review types of errors due to the overlap in some instances from identifying both a medical record review error and a data processing review errors on the same claim.

[4] The data processing review types of errors cannot be combined with the medical record review types of errors due to the overlap in some instances from identifying both a medical record review error and a data processing review errors on the same claim.

Figure 2 National Medicaid Managed Care Payment Error Rate by Type of Error



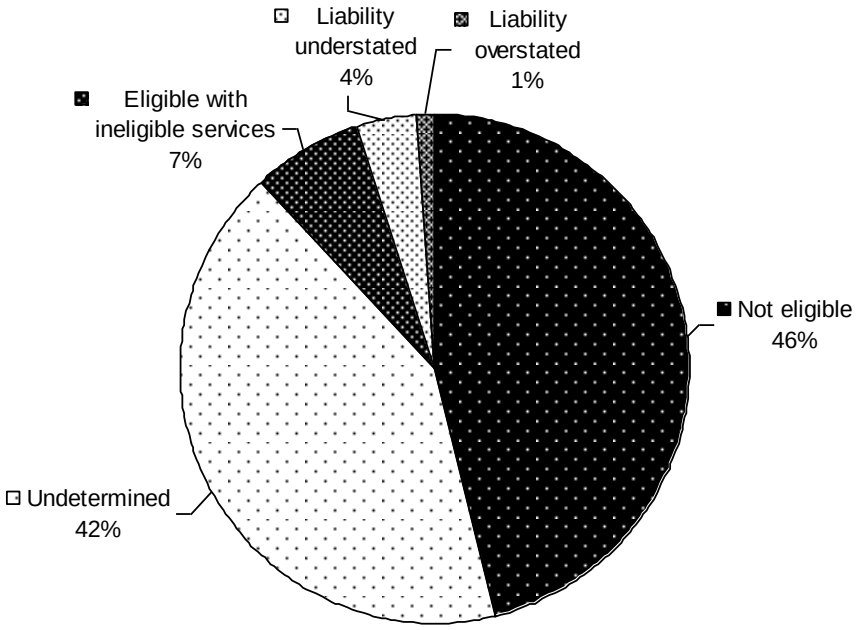
3.2.5 National Medicaid Eligibility Payment Error Rate by Type of Error

Of the Medicaid eligibility payments projected to be in error due to all types of errors found, the following points are noted:

- "**Not Eligible**" errors are the largest source of error (46 percent), followed by
- "**Undetermined**" errors (42 percent), and
- "**Eligible with ineligible services**" errors (7 percent).

Refer to Figure 3 below.

Figure 3 National Medicaid Eligibility Payment Error Rate by Type of Error



3.3 Overpayments and Underpayments

A total of 9,182 Medicaid FFS claims, 3,340 managed care payments, and 8,661 eligibility cases were reviewed for inclusion in the PERM FY 2008 measurement. All FFS claims and managed care payments were subjected to independent data processing reviews and those relevant were subjected to independent medical reviews. All eligibility cases were reviewed by each state.

Of the 9,182 FFS claims reviewed, 217 medical review errors were found. Of the medical review errors:

- 209 overpayment errors were found with a total dollar value of $472,972, or 93.3 percent of the improper payments attributable to medical review;
- 8 underpayment errors were found with a total dollar value of $33,880, or 6.7 percent of the improper payments attributable to medical review.

Of the 9,182 FFS claims reviewed, 156 data processing review errors were found. Of the data processing review errors:

- 113 overpayment errors were found with a total value of $434,903, or 98.5 percent of the improper payments attributable to data processing reviews;
- 43 underpayment errors were found with a total dollar value of $6,537 or 1.5 percent of the improper payments attributable to data processing reviews.

Of the 8,661 cases reviewed for eligibility, 775 cases had eligibility errors.

- 766 cases with eligibility errors had overpayment errors valued at $261,831, or 98.8 percent of the improper payments attributable to eligibility reviews;
- 9 cases with eligibility errors had underpayments valued at $3,227, or 1.2 percent of the improper payments attributable to eligibility reviews.

Of the 3,340 managed care payments reviewed, 31 errors were found. Of the managed care payment errors:

- 12 overpayments were found with a total value of $2,049, or 96.4 percent of the improper payments attributable to managed care reviews;
- 19 underpayments were found with a total value of $76, or 3.6 percent of the improper payments attributable to managed care reviews.

Table 12 summarizes overpayments and underpayments by type of review.

Table 12 Summary of Medicaid FFS Overpayments and Underpayments

	Program	Overpayments		Underpayments	
		Number of Errors	Dollar Amount of Errors	Number of Errors	Dollar Amount of Errors
Eligibility	Medicaid	766	$261,831	9	$3,227
FFS Medical Review	Medicaid	209	$472,972	8	$33,880
FFS Data Processing	Medicaid	113	$434,903	43	$6,537
Managed Care	Medicaid	12	$2,049	19	$76

3.4 Common Error Causes

3.4.1 Medicaid Eligibility

Eligibility errors (775) are the highest number of errors found, followed by FFS claims' medical review and data processing errors (373) and then managed care payment errors (31).

The table below summarizes the number and dollar amounts of Medicaid eligibility review errors. "Not eligible" and "undetermined case" errors contribute the most number and dollars in error. "Eligible cases with ineligible services" contribute notable number and dollars in error. By definition, the only review finding that results in underpayments is "liability overstated." All detailed findings are held at the State level since the States conduct the eligibility reviews. Eligibility policies and procedures vary by State and State-specific error trends will be addressed during corrective action.

Table 13 Number and Dollar Amount of Medicaid Eligibility Errors (Within Sample)

Error Code	Error Type	Total Number of Errors	Overpayments		Underpayments		Percentage of Total Errors	
			Number of Errors	Dollars in Error	Number of Errors	Dollars in Error	% of Total Number of Errors	% of Total Dollars in Error
U	Undetermined	343	343	$98,443	0	$0	44.30%	37.10%
NE	Not eligible	316	316	$95,582	0	$0	40.80%	36.10%
EI	Eligible with ineligible services	65	65	$50,686	0	$0	8.40%	19.10%
L/U	Liability understated	32	32	$15,751	0	$0	4.10%	5.90%
L/O	Liability overstated	9	0	$0	9	$3,227	1.20%	1.20%
MCE1	Managed care error, ineligible for managed care	7	7	$1,213	0	$0	0.90%	0.50%
MCE2	Managed care error, eligible for managed care but improperly enrolled	3	3	$156	0	$0	0.40%	0.10%
	Total	775	766	$261,831	9	$3,227	100.00%	100.00%

States were required to submit their monthly eligibility review and payment review findings in order to calculate state specific and national eligibility error rates.

Table 14 below shows the review findings for the FY 2008 eligibility measurement for active cases reviewed. It contains the number of cases cited with each eligibility review finding and the percentage of all active cases found in each finding category and the dollars in error.

Table 14 Medicaid Eligibility Review Findings for Active Cases

Stratum	Number of Cases	Percentage of Cases	Dollars in Error
Eligible	7,886	91.05%	$0
Undetermined	343	3.96%	$98,443
Not eligible	316	3.65%	$95,582
Eligible with ineligible services	65	0.75%	$50,686
Liability understated	32	0.37%	$15,751
Liability overstated	9	0.10%	$3,227

Stratum	Number of Cases	Percentage of Cases	Dollars in Error
Managed care error, ineligible for managed care	7	0.08%	$1,213
Managed care error, eligible for managed care but improperly enrolled	3	0.03%	$156
Active Cases	8,661	100.00%	$265,058

Over one-third of all the active cases in error and dollars in error are due to cases that are not eligible and over one-third are due to undetermined cases. Almost 20 percent of the dollars in error are due to eligible cases with ineligible services.

In addition to the active case eligibility reviews that determined the number of cases in error and the eligibility payment error rate that determined the dollars in error, Table 15 below shows the review findings for the negative cases reviewed. It contains the number of cases cited as correct, improperly denied, or improperly terminated. Of the 4.36 percent of negative cases in error, improper terminations account for more errors than improper denials.

Table 15 Medicaid Eligibility Review Findings for Negative Cases

Stratum	Number of Cases	Percentage of Cases	Dollars in Error
Correct	3,334	95.64%	$0
Improper termination	92	2.64%	$0
Improper denial	60	1.72%	$0
Negative Cases	3,486	100.00%	$0

Our eligibility data is limited as each state under the PERM program performed their own eligibility reviews and was only required to report their eligibility and payment findings. We reviewed the Active Case Review Finding Submission Forms to identify the cause for errors reported by the states. The following reasons were the most frequently cited; however, it should be noted that most errors revolve around caseworker errors, misapplication of income and resources policies and lack of internal controls:

- Cases were over the program income limits;
- Income was calculated incorrectly in the case record;

    - Case workers did not correctly count gross and/or net income, and
    - Case workers included or excluded income incorrectly,
- Cases did not meet categorical eligibility criteria for any category of assistance;
    - Beneficiary did not meet disability criteria,
- Cases exceeded resource limits; and
- Cases did not meet residency requirements,
- Case decisions were inconclusive, or "undetermined" due to insufficient documentation.

Some states had a high number of undetermined cases. During interviews several states with fewer undetermined cases mentioned they were able to cut down on the number of undetermined cases by pursuing an aggressive strategy to obtain the required information.

3.4.2 Medicaid FFS Medical Review

For FY 2008, medical review errors account for approximately the same overall dollar value of errors as data processing errors. Medical review errors amount to $506,852 (53.4 percent), while data processing errors amount to $441,440 (46.6 percent).

Of the nine types of medical review errors, Insufficient Documentation (MR2) and No Documentation (MR1) errors are the most common. Insufficient Documentation and No Documentation errors account for 64.5 percent of the number of medical review errors and 65.5 percent of the total medical review dollars in error. See Table 16 for a summary of the number and dollar amount of errors by medical review error type. Note that dollars are rounded.

Table 16 Number and Dollar Amount of Medicaid FFS Medical Review Errors (Within Sample)

Error Code	Error Type	Total Number of Errors	Overpayments		Underpayments		Percentage of Total Errors	
			Number of Errors	Dollars in Error	Number of Errors	Dollars in Error	% of Total Number of Errors	% of Total Dollars in Error
MR02	Insufficient Documentation	74	74	$173,722	0	$0	34.1%	34.3%
MR01	No Documentation	66	66	$157,968	0	$0	30.4%	31.2%
MR06	Number of units Error	32	32	$54,118	0	$0	14.7%	10.7%
MR03	Procedure Coding Error	22	17	$12,718	5	$32,341	10.1%	8.9%
MR04	Diagnosis Coding Error	9	7	$43,216	2	$1,447	4.1%	8.8%
MR07	Medically unnecessary service	7	7	$29,635	0	$0	3.2%	5.8%
MR08	Policy violation	3	3	$1,101	0	$0	1.4%	0.2%
MR09	Administrative/ Other	3	3	$494	0	$0	1.4%	0.1%
MR05	Unbundling	1	0	$0	1	$92	0.5%	0.0%
	Total	217	209	$472,972	8	$33,880	100.0%	100.0%

Figure 4 Medicaid FFS Medical Review Errors by Error Type

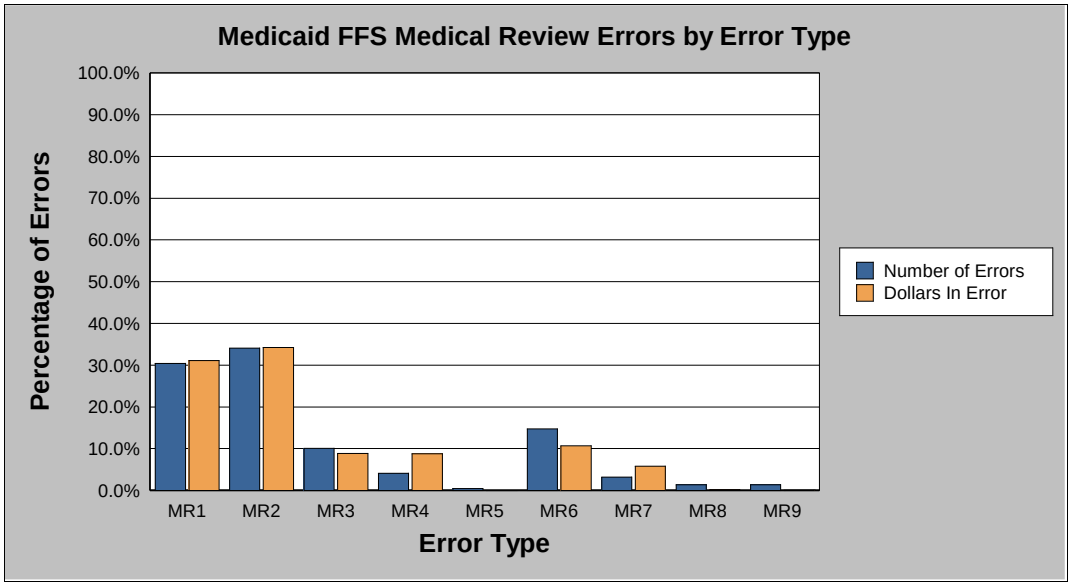


Table 16 and Figure 4 show that the three error categories with the highest percentages of medical review dollars found in error are as follows:

- Insufficient Documentation,
- No Documentation; and
- Number of Units.

The above errors are approximately 76.2 percent of the total Medicaid medical review dollars found to have been paid in error.

Insufficient Documentation Errors

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

In several cases of "insufficient documentation," it was clear that the Medicaid beneficiary received services, but the physician's orders or documentation supporting the beneficiary's medical condition were incomplete. These claims did not meet Medicaid reimbursement rules regarding documentation required to support a claim.

In some instances, the medical record was received but was missing necessary information. The partial documentation was sometimes located and maintained at a third party facility. For instance, although a lab may have billed for a blood test, it was the physician who ordered the lab test and maintained the medical record. In these instances, if the billing provider failed to contact the third party or the third party failed to submit the missing documentation, CMS counted the claims as insufficient documentation errors because only partial records were received for the claims.

In the Medicaid FFS component, insufficient documentation errors account for 74 errors (34.1 percent) and for $173,722 (34.3 percent) of the improper payments attributable to medical review. The majority of the 74 insufficient documentation errors fall into three service categories/types: 1) personal support services, 2) outpatient hospital services, practitioners, clinics, and 3) nursing facility, ICF and ICF/MR, chronic care services. These service types account for 63.9 percent of the insufficient documentation errors and 64.1 percent of this error type's total dollars in error.

Of the 15 medical review claim categories[5], 13 claim categories had "insufficient documentation" errors. It should be noted that two of the seventeen states reviewed had no "insufficient documentation" errors.

In the service category of personal support services, our research suggests that the necessary start and stop times for services and therapies billed in minutes and hours were not being recorded properly. For the service category of outpatient hospital services, practitioners, clinics services, it is speculated that the reason for insufficient documentation findings are due to missing physician orders for prescriptions and other outpatient services billed. For the service category of nursing facility, ICF and ICF/MR, chronic care services, our experience suggests that the current medical record for the patient was often provided instead of the patient's record supporting the sampled date of service and in some cases, nursing facilities billed for leave of absence days when patients were hospitalized or on family leave.

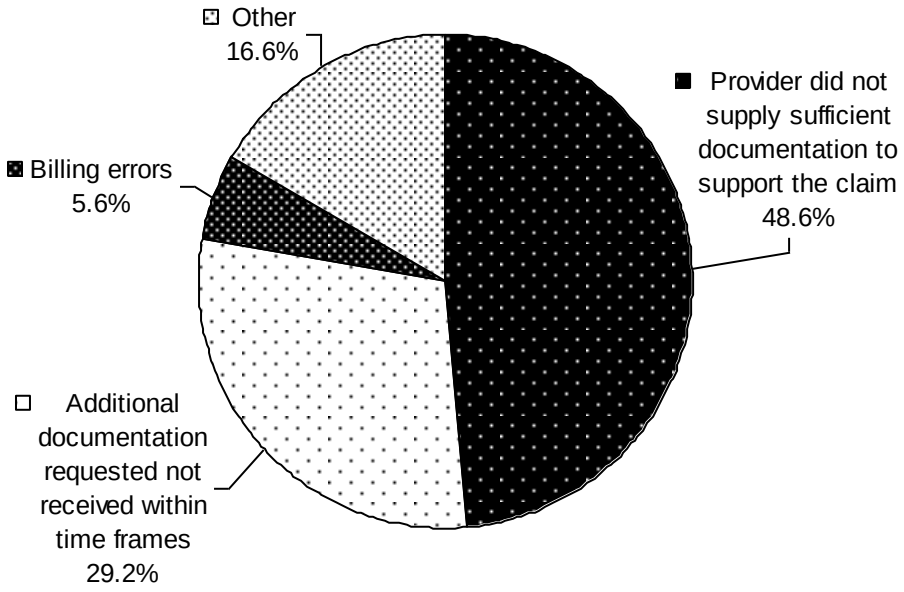
The most common causes of insufficient documentation errors are:

- Additional documentation submitted was still determined insufficient (48.6 percent)
- Providers failed to respond timely to requests for additional documentation (29.2 percent)
- Provider stated they had made billing errors (5.6 percent)

See Figure 5 for the distribution of the most common causes of insufficient documentation errors.

[5] Claim categories are defined in Appendix D.

Figure 5 Common Causes for Medicaid FFS Insufficient Documentation Errors



The following are specific examples of insufficient documentation in the medical record:

- Provider submitted records for the wrong dates of service (current year rather than date of service sampled).
- Records submitted lacked evidence of physician oversight and approved plans of care.
- Missing documentation of time spent for individual therapy with the patient (billing code was based on time spent with the patient).
- Missing documentation for specific tasks performed on dates of service sampled (missing attendance logs).
- Billing errors for patients not seen or provided services on the dates of service sampled.

No Documentation Errors

"No Documentation" means the provider did not submit any documentation to support the services provided.

In the Medicaid FFS component, no documentation errors account for 66 errors (30.4 percent) and for $157,968 (31.2 percent) of the improper payments attributable to medical review. The majority of the "no documentation" errors fall into the following service categories/types: (1) personal support services, (2) prescribed drug services, and (3) equally weighted for the top third category are dental and oral surgery services; outpatient hospital services, practitioners, clinics services; and psychiatric, mental health, and behavioral health services. These service types account for 83.6 percent of the no documentation errors and 59 percent of total dollars in error for this error type.

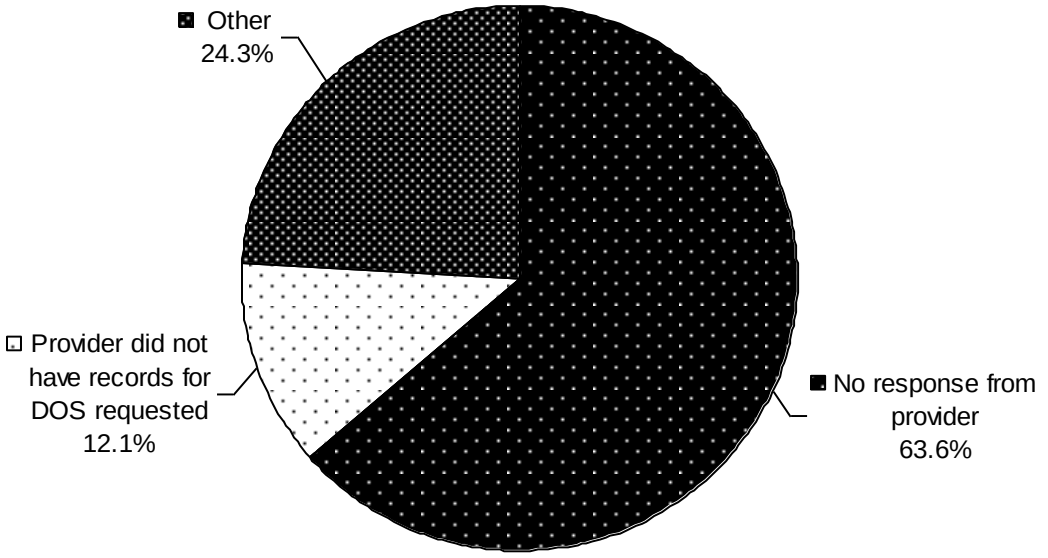
Of the 15 medical review claim categories, 11 claim categories had "no documentation" errors. It should be noted that six of the seventeen states reviewed had no "no documentation" errors.

The most common causes of no documentation errors are:

- No response from providers after multiple requests (63.6 percent)
- Provider did not have documentation for the dates of service requested (12.1 percent)

See Figure 6 for the distribution of the most common causes of no documentation errors.

Figure 6 Common Causes for Medicaid FFS No Documentation Errors



CMS attributes non-response to multiple factors, including provider lack of familiarity with the PERM contractor, concerns about compliance with the Health Insurance Portability and Accountability Act (HIPAA), and cases where documentation did not exist. In some instances, all of the documentation may be located at a third party. If providers failed to contact the third party or the third party failed to submit the documentation, CMS counted the claim as a no documentation error because no records were received from the treating provider for the claim sampled.

The following are specific examples of the documents requested and not submitted by the providers:

- For personal support service claims – attendance logs for proof of service provided and individual service plans authorizing services.
- For prescribed drug service claims – copies of signed original prescriptions with route, dosage, and frequency of prescribed medication recorded.
- For psychiatric, mental health, and behavioral health service claims – Mental health assessments, and approved treatment plans.

Number of Units Errors

"Number of Units" means the provider billed for an incorrect number of units for a particular service billed.

In the Medicaid FFS component, number of unit errors accounts for 32 errors (14.7 percent) and for $54,118 (10.7 percent) of the improper payments attributable to medical review. The majority of the 32 number of unit errors fall into the following service categories/types: (1) psychiatric, mental health, and behavioral health service, (2) personal support services and (3) outpatient hospital services, practitioners, clinics. These service types account for 84.4 percent of the number of unit errors and 58.8 percent of total dollars in error for this error type.

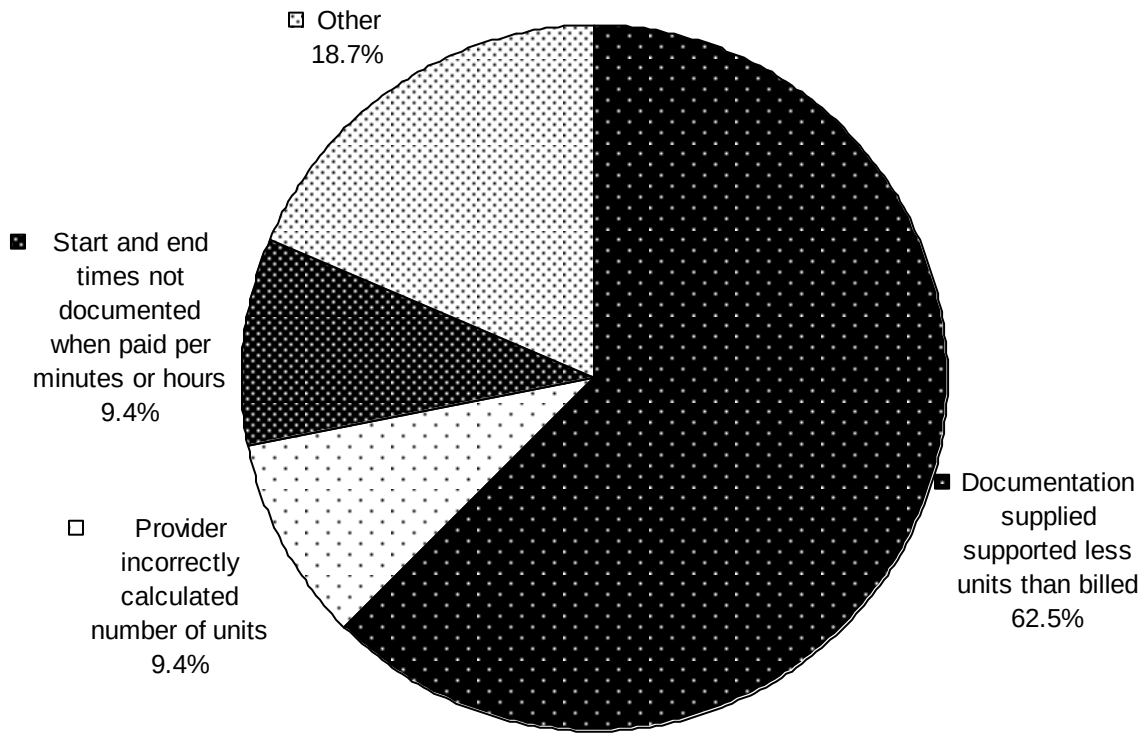
Of the 15 medical review claim categories, only seven claim categories had "number of unit" errors. It should be noted that three of the seventeen states reviewed had no "number of unit" errors.

The most common causes of number of unit errors are:

- Documentation supplied by providers supported less number of units than billed (62.5 percent)
- Provider incorrectly calculated the number of units (9.4 percent)
- Start and stop times for services were not documented (when paid per minutes or hours) (9.4 percent)

See Figure 7 for the distribution of the most common causes of number of unit errors.

Figure 7 Common Causes for Medicaid FFS Number of Units Errors



3.4.2.1 Medicaid FFS Medical Review Errors by Cost Per Error

Even though insufficient documentation errors and no documentation errors are the most frequent and the highest total dollars in error for medical review, it should be noted that on a cost per error basis, other error types surface to be more costly. Table 17 below shows that the average for diagnosis coding errors and medically unnecessary service errors are the highest on a cost per error basis.

Table 17 Number and Dollar Amount of Medicaid FFS Medical Review Errors by Cost Per Error

Error Code	Error Type	Number of Errors		Dollars in Error		Cost Per Error
MR2	Insufficient Documentation	74	34.1%	$173,722	34.3%	$2,348
MR1	No Documentation	66	30.4%	$157,968	31.2%	$2,393
MR6	Number of Units Error	32	14.7%	$54,118	10.7%	$1,691
MR3	Procedure Coding Error	22	10.1%	$45,059	8.9%	$2,048
MR4	Diagnosis Coding Error	9	4.1%	$44,663	8.8%	$4,963
MR7	Medically unnecessary service	7	3.2%	$29,635	5.8%	$4,234
MR8	Policy violation	3	1.4%	$1,101	0.2%	$367
MR9	Administrative/Other	3	1.4%	$494	0.1%	$165
MR5	Unbundling	1	0.5%	$92	0.0%	$92
	Total	217	100.0%	$506,852	100.0%	$2,336

3.4.2.2 Medicaid FFS Medical Review Errors by Service Type

Table 18 below summarizes medical review errors by service type for Medicaid. Note that these rates are not weighted by state. These rates only reflect the errors in the sample and are not comparable to the national error rate.

Table 18 Medicaid FFS Medical Review Errors by Service Type

Service Type	Number of Errors		Dollars In Error		Cost Per Error
	Number of Errors	% Total Number of Errors	Dollars in Error	% Total Dollars in Error	
Outpatient Hospital Services, Practitioners, Clinics	42	19.4%	$59,868	11.8%	$1,425
Personal Support Services	31	14.3%	$25,709	5.1%	$829
Psychiatric, Mental Health, and Behavioral Health Services	28	12.9%	$78,173	15.4%	$2,792
Habilitation and Waiver Programs, Adult Day Care and Foster Care	26	12.0%	$40,631	8.0%	$1,563
Prescribed Drugs	25	11.5%	$8,855	1.7%	$354
Inpatient Hospital	24	11.1%	$202,049	39.9%	$8,419
Nursing Facility, ICF and ICF/MR, Chronic Care Services	13	6.0%	$79,724	15.7%	$6,133
Dental and Oral Surgery Services	11	5.1%	$1,244	0.2%	$113
Transportation and Accommodations	7	3.2%	$2,719	0.5%	$388
Hospice Services	2	0.9%	$3,804	0.8%	$1,902
Laboratory, X-ray and Imaging Services	2	0.9%	$3,648	0.7%	$1,824
Vision: Ophthalmology, Optometry and Optical Services	2	0.9%	$115	0.0%	$57
Durable Medical Equipment(DME) and supplies	2	0.9%	$87	0.0%	$43
Home Health Services	1	0.5%	$158	0.0%	$158
Therapies, Hearing and Rehabilitation Services	1	0.5%	$69	0.0%	$69
Total	217	100.0%	$506,852	100.0%	$2,336

The top three service types with the highest number of errors for Medicaid FFS medical reviews are 1) outpatient hospital services, practitioners, clinics services (19.4 percent), 2) personal support services (14.3 percent), and 3) psychiatric, mental health, and behavioral health services (12.9 percent).

Within the Medicaid FFS component, the most costly errors are in 1) inpatient hospital services (39.9 percent), 2) nursing facility, ICF and ICF/MR, chronic care services (15.7 percent), and 3) psychiatric, mental and behavioral health services (15.4 percent).

3.4.3 Medicaid FFS Data Processing Review

The table below summarizes the number and dollar amount of Medicaid FFS data processing errors. Of the ten types of data processing review errors, non-covered service (DP2) and administrative/other (DP10) errors are the most costly, although pricing errors (DP5) are the most frequent cause of error. Note that dollars are rounded.

Table 19 Number and Dollar Amount of Medicaid FFS Data Processing Errors (Within Sample)

Error Code	Error Type	Total Number of Errors	Overpayments		Underpayments		Percentage of Total Errors	
			Number of Errors	Dollars in Error	Number of Errors	Dollars in Error	% of Total Number of Errors	% of Total Dollars in Error
DP5	Pricing Error	63	23	$10,246	40	$6,098	40.4%	3.7%
DP2	Non-Covered Service	50	50	$160,373	0	$0	32.1%	36.3%
DP10	Administrative/ Other	22	22	$134,686	0	$0	14.1%	30.5%
DP6	Logic Edit	7	7	$53,328	0	$0	4.5%	12.1%
DP7	Data Entry Error	5	2	$13,899	3	$439	3.2%	3.2%
DP1	Duplicate Item	4	4	$30,554	0	$0	2.6%	6.9%
DP3	Managed Care Service	3	3	$31,457	0	$0	1.9%	7.1%
DP4	Third-party Liability	2	2	$358	0	$0	1.3%	0.1%
DP8	Rate Cell Error	0	0	$0	0	$0	0.0%	0.0%
DP9	Managed Care Payment Error	0	0	$0	0	$0	0.0%	0.0%
	Total	156	113	$434,903	43	$6,537	100.0%	100.0%

Figure 8 Medicaid FFS Data Processing Review Errors by Error Type

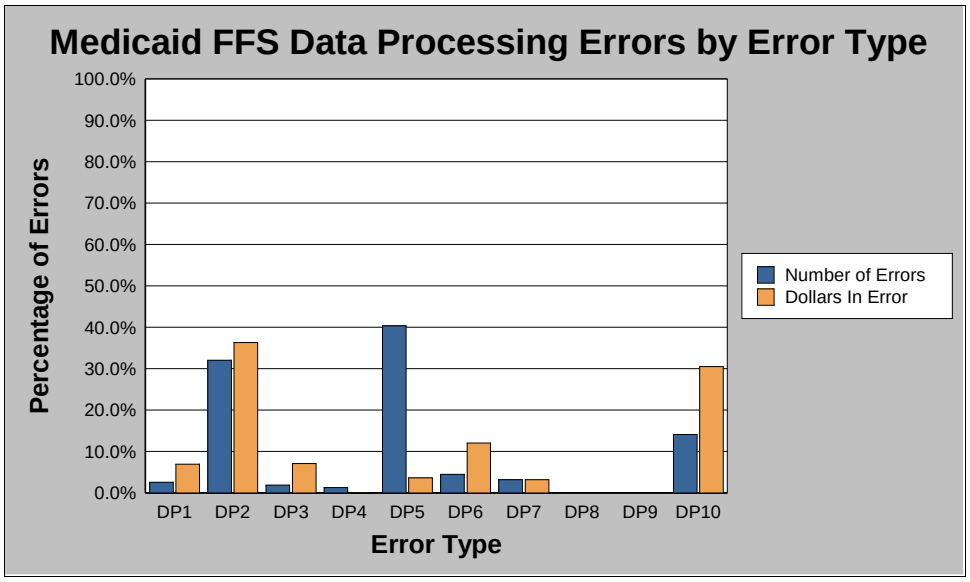


Table 19 and Figure 8 show that within Medicaid FFS data processing reviews, the three most common errors are:

- Pricing (40.4 percent)
- Non-covered service (32.1 percent)
- Administrative/Other (14.1 percent)

These three error types account for approximately 86.6 percent of the total number of Medicaid FFS data processing review errors found and 70.5 percent of the total data processing dollars in error. However, non-covered service errors and administrative/other errors are the highest total dollars in error, respectively. For data processing errors, non-covered service errors are 36.3 percent of the total dollars in error and administrative/other errors are 30.5 percent of the total dollars in error.

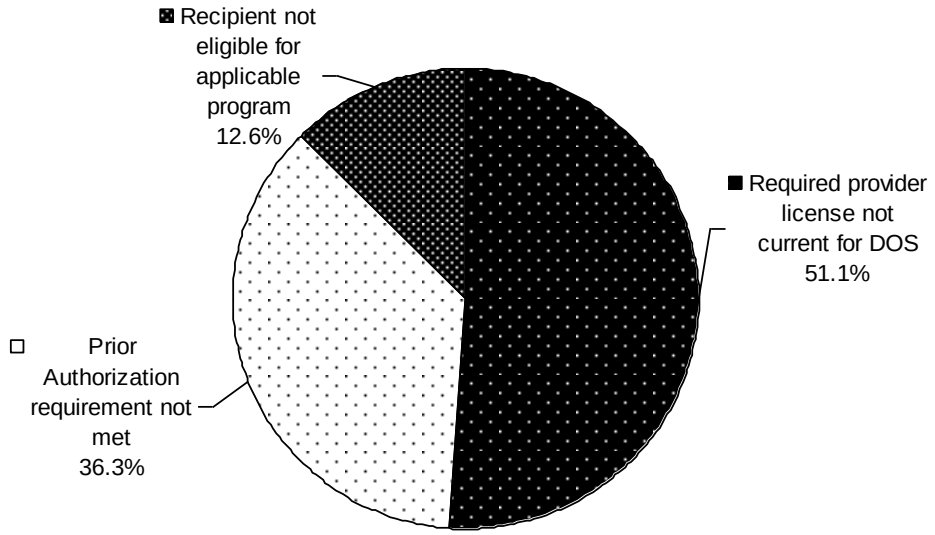
Non-Covered Service Errors

Non-covered service errors account for 32.1 percent of the number of data processing errors and 36.3 percent of the total data processing dollars in error. A "non-covered service" error occurs when State policies indicate that the service is not payable by Medicaid under the state plan or for the coverage category under which the person is eligible, or the provider is not registered or licensed according to state and/or federal regulations.

There are 50 non-covered service errors found in eight states and all are overpayments. One state, which accounts for 64 percent of these errors, did not have the required providers' licenses current. State policy is to only pay individuals or entities with a current provider agreement with the State Agency. Two states, which account for 20 percent of these errors, did not have the required prior authorizations and four states, which account for 16 percent of these errors, had paid claims for recipients that were not eligible for applicable programs.

See Figure 9 for the distribution of the most common causes of non-covered service errors.

Figure 9 Common Error Causes for Medicaid FFS Non-Covered Service Errors



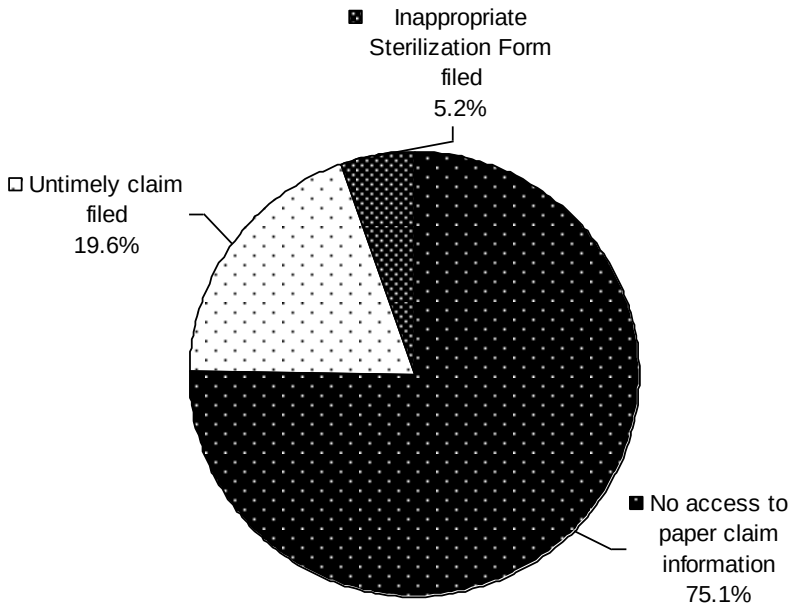
Administrative/Other Errors

Administrative/other errors account for 14.1 percent of the number of data processing errors and 30.5 percent of the total data processing dollars in error. An "administrative/other" error occurs when a payment error was discovered during a data processing review but the error was not a DP1 – DP9 error. The most common citings are for not meeting the timely filing requirements of the state or missing documentation required to support the claim payment.

One state accounts for 59 percent of these errors due to no access to paper claims to complete the duplicate claims review check. Two states account for 36.5 percent of these errors due to payment of untimely filed claims. One state, accounting for 4.5 percent of these errors, had accepted inappropriate sterilization consent forms not meeting current guidelines.

See Figure 10 for the distribution of the most common causes of administrative/other errors.

Figure 10 Common Error Causes for Medicaid FFS Administrative/Other Errors



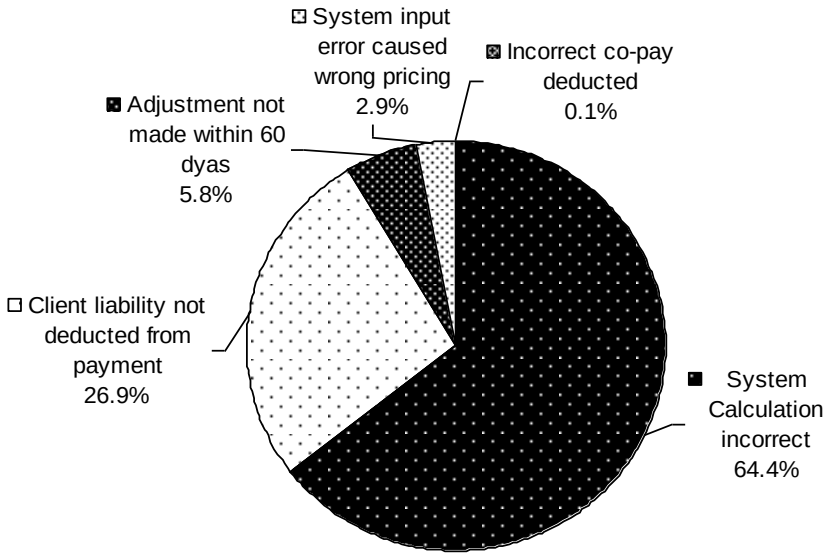
Pricing Errors

Pricing errors account for 40.4 percent of the number of data processing errors, making it the most frequent error, yet pricing errors only account for 3.7 percent of the dollars in error. Pricing errors include incorrect pricing methodology, rounding errors, incorrect deductions from payment, etc.

Incorrect systems calculations, accounting for 64.4 percent of these errors, are due to claims paid using the wrong rates, claims paid for leave days inappropriately and rounding errors. Client liability not deducted before payment accounts for 26.9 percent of these errors. Adjustments not made within 60 days accounts for 5.8 percent of these errors and system input errors causing wrong pricing accounts for 2.9 percent of these errors.

See Figure 11 for the distribution of the most common causes of pricing errors.

Figure 11 Common Error Causes for Medicaid FFS Pricing Errors



3.4.3.1 Medicaid FFS Data Processing Errors by Cost Per Error

While pricing and non-covered service errors are the most frequently occurring types of errors in data processing reviews, it should be noted that managed care service, duplicate items and logic edit errors have the highest cost per error. Managed care service errors have an average of $10,486 cost per error; duplicate items errors average to $7,639 cost per error and logic edit errors average to $7,618 cost per error.

Refer to Table 20 for a summary of the number and dollar value of errors by data processing error type and the cost per error. Note that dollars are rounded.

Table 20 Medicaid FFS Data Processing Review Errors by Cost Per Error

Error Code	Error Type	Number of Errors		Dollars In Error		Cost Per Error
DP5	Pricing Error	63	40.4%	$16,344	3.7%	$259
DP2	Non-Covered Service	50	32.1%	$160,373	36.3%	$3,207
DP10	Administrative/Other	22	14.1%	$134,686	30.5%	$6,122
DP6	Logic Edit	7	4.5%	$53,328	12.1%	$7,618
DP7	Data Entry Error	5	3.2%	$14,338	3.2%	$2,868
DP1	Duplicate Item	4	2.6%	$30,554	6.9%	$7,639
DP3	Managed Care Service	3	1.9%	$31,457	7.1%	$10,486
DP4	Third-party Liability	2	1.3%	$358	0.1%	$179
DP8	Rate Cell Error	0	0.0%	$0	0.0%	$0
DP9	Managed Care Payment Error	0	0.0%	$0	0.0%	$0
	Total	156	100.0%	$441,440	100.0%	$2,830

3.4.4 Medicaid Managed Care

Of the 17 states selected for the FY 2008 measurement, 12 states have a Medicaid managed care program. The universe for the managed care component consisted of managed care payments made on behalf of beneficiaries between October 1, 2007 and September 30, 2008. A total of 3340 managed care sampling units were reviewed. Medicaid managed care sampling units were subject to a data processing review only.

A total of 31 errors are identified, representing $2,125 in payment errors. Twenty-six errors are DP9 errors, or managed care payment errors, where the beneficiary was enrolled in managed care, but was assigned the wrong payment amount. Managed care payment errors total $526 and have an average cost per error of $20.

Five errors are DP2 errors, or non-covered service errors, where state policies indicated that the service was not payable by Medicaid under the state plan or for the coverage category under which the person was eligible. Non-covered service errors total $1,599 and have an average cost per error of $320.

See Table 21 below which shows that no other error types are found in managed care reviews.

Table 21 Medicaid Managed Care Errors by Cost Per Error

Error Code	Error Type	Number of Errors		Dollars in Error		Cost Per Error
DP9	Managed Care Payment Error	26	83.9%	$526	24.8%	$20
DP2	Non-Covered Service	5	16.1%	$1,599	75.2%	$320
DP1	Duplicate Item	0	0.0%	$0	0.0%	$0
DP3	Managed Care Service	0	0.0%	$0	0.0%	$0
DP4	Third-party Liability	0	0.0%	$0	0.0%	$0
DP5	Pricing Error	0	0.0%	$0	0.0%	$0
DP6	Logic Edit	0	0.0%	$0	0.0%	$0
DP7	Data Entry Error	0	0.0%	$0	0.0%	$0
DP8	Rate Cell Error	0	0.0%	$0	0.0%	$0
DP10	Administrative/Other	0	0.0%	$0	0.0%	$0
	Total	31	100.0%	$2,125	100.0%	$69

Figure 12 Medicaid Managed Care Errors by Error Type

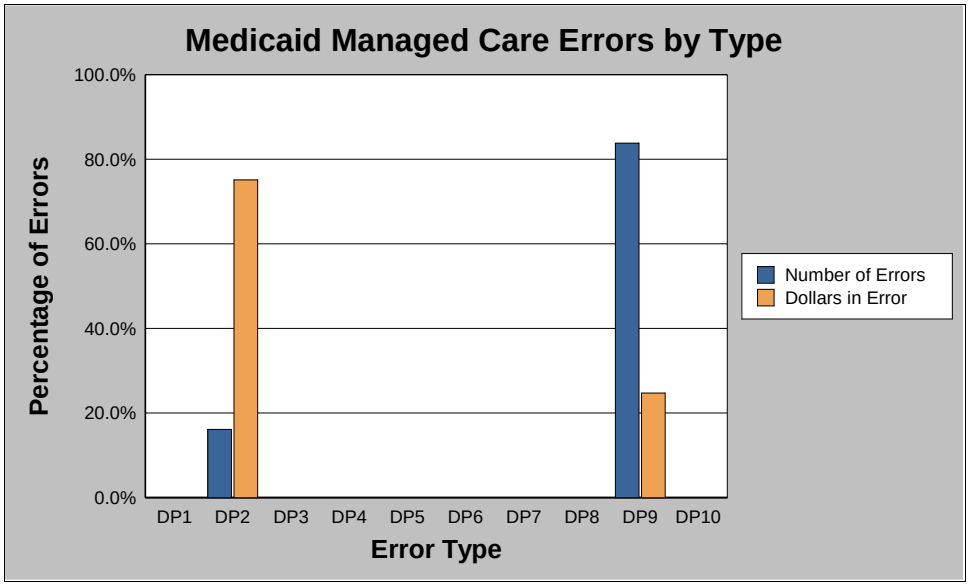


Table 21 and Figure 12 show that the errors fall into two error categories: DP 2, non-covered service errors, and DP 9, managed care payment errors. While the number of managed care payment errors is higher than non covered service errors, non-covered service errors are more costly. The managed care payments errors are all the result of incorrect rate programming and are not for the full amount of the payment. This type of error represents 25 percent of the total amount of dollars in error for managed care. The non-covered services errors represent errors

where the recipient did not show eligible for the months that capitation payments were paid, resulting in 100 percent of the payment in error. Non-covered service errors represent 75 percent of the total amount of dollars in error for managed care payments.

3.5 GPRA Goals

The Government Performance and Results Act (GPRA) holds federal agencies accountable for using resources wisely and achieving program results. GPRA requires that CMS and other agencies develop plans for what they intend to accomplish, measure how well they are doing, make appropriate decisions based on the information they have gathered, and communicate information about their performance to Congress and to the public.

GPRA requires agencies to develop a five-year Strategic Plan, which includes a mission statement and sets out long-term goals and objectives; Annual Performance Plans, which provide annual performance commitments toward achieving the goals and objectives presented in the Strategic Plan; and Annual Performance and Accountability Reports, which evaluate an agency's progress toward achieving performance commitments.

Under the GPRA, CMS aims to report a FY 2008 national error rate for the Medicaid program in the FY 2009 Agency Financial Report based on FFS, managed care, and eligibility reviews.

3.6 Corrective Action Focus

The findings and recommendations for corrective actions will be addressed in the national error rate reduction plan to be published in the spring of 2010. While more recommendations may be provided at that time, it appears that the three main sources of eligibility errors are due to case worker error, misapplication of income and resource policies and lack of internal controls. The recommendations for corrective action for FFS are improving provider responses to original record and additional documentation requests for information, preventing non-covered service errors for services not covered by Medicaid and keeping provider registrations current.

Corrective actions implemented by the FY 2006 and FY 2007 states include the following:

- Enhanced provider education through provider newsletters, alerts, provider website notices and provider remittance advice notices,
- Tracking medical record requests and contacting providers not responding timely,
- Training eligibility staff in policies and procedures for eligibility determinations, and
- Proposed new edits for claims processing systems.

To reduce the national Medicaid error rate, CMS needs to work with states first on reducing eligibility errors caused by caseworker errors and lack of internal controls. States may need to aggressively pursue information needed to reduce the number of undetermined case errors. The second priority should be to reduce medical review errors caused by providers not submitting required documentation or not recording sufficient information in records to meet states' policy

requirements. The third focus for reducing the error rate is for data processing errors caused by untimely updates of fee schedules in claims processing systems, non-current provider registrations and non-functioning system edits.

The main causes for error and the service categories where these errors occur for large, medium and small state strata for medical review and data processing review findings are shown in Figure 13 and Figure 14 below.

Figure 13 Medicaid FFS Medical Review State Corrective Action Focus

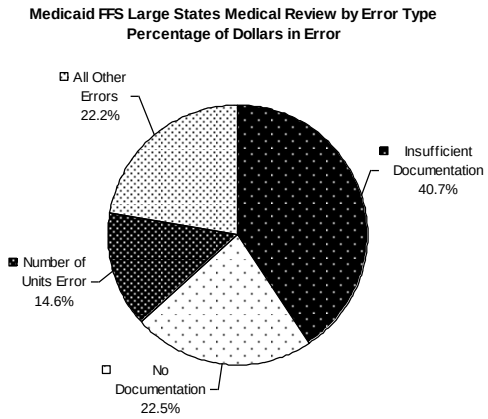
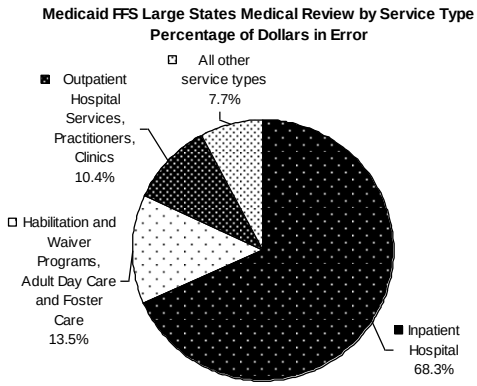
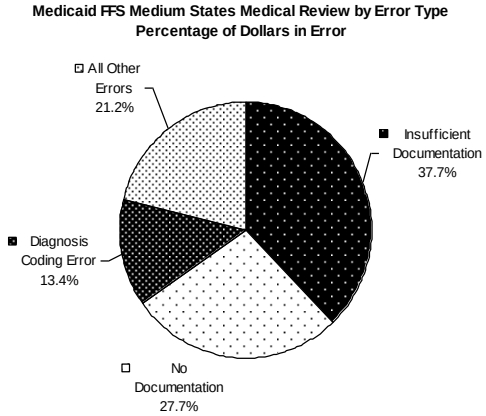
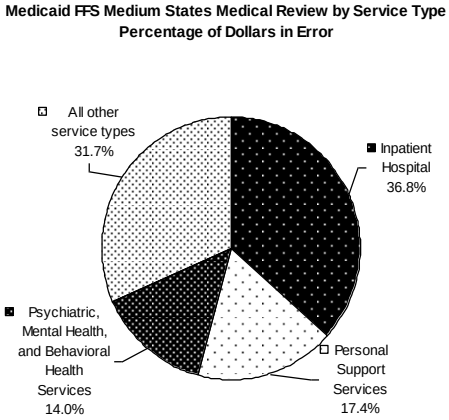
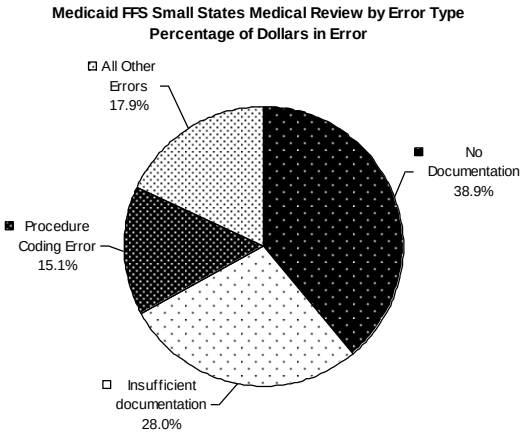
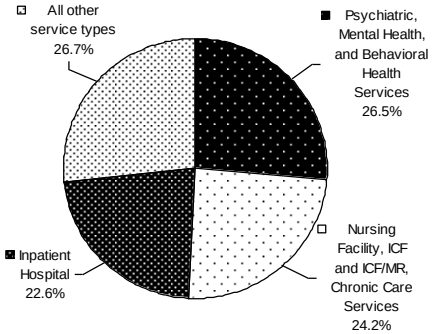
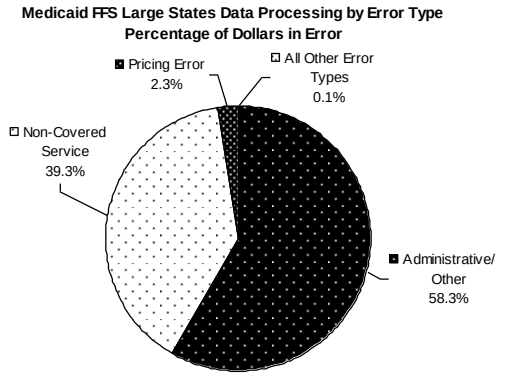
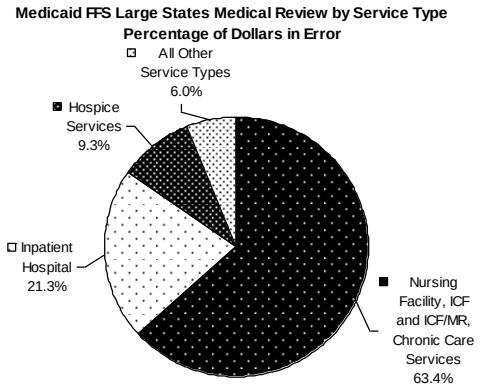
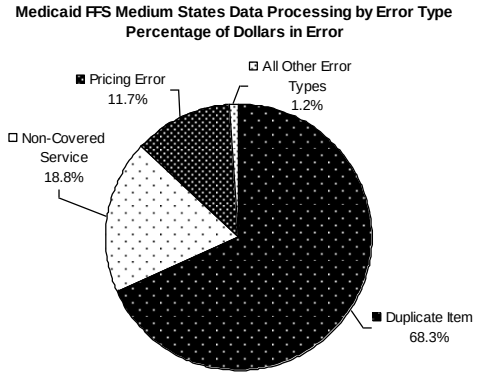
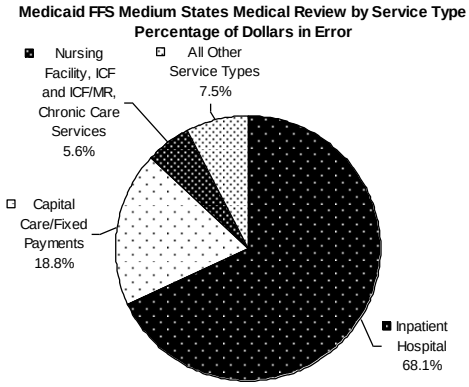
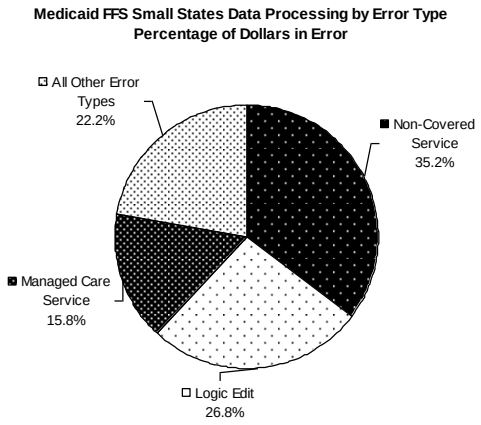
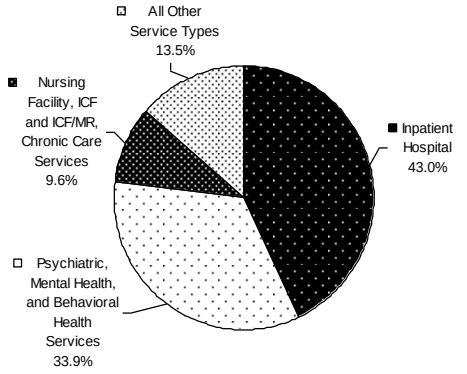
Focus by Error Type	Focus by Service Type
	
	
	

Figure 14 Medicaid FFS Data Processing State Corrective Action Focus

Focus by Error Type	Focus by Service Type
	
	
	

4 Recommendations for Improvements

4.1 Greater Advance Notice

The experience of the first two PERM cycles suggested that state involvement in a variety of activities such as ensuring that provider contact information was up-to-date and notifying providers about the PERM program could all result in fewer errors due to lack of documentation, the primary driver of the PERM error rate in FY 2006 and FY 2007. However, CMS published the list of which states were selected for each cycle in August 2006, meaning that FY 2007 states had shorter notice before the cycle beginning than FY 2008 states. FY 2008 states were notified of their selection more than a year before the beginning of the measurement period, allowing them greater time to identify and allocate state resources, notify providers, and improve data. This appears to have contributed to timely completion of the measurement in FY 2008 and vastly reduced documentation errors.

4.2 Improve Communication and Streamline Procedures

States received further education on the PERM process through CMS-initiated cycle calls, on-site visits at selected states and website activity. Most states were better informed about how their data is used by the PERM program, which facilitated cleaner more accurate data submissions on a quarterly basis. CMS has designated a cycle manager as the lead for a fiscal year measurement and as the main point of contact at CMS for each year to improve communication with states. CMS utilizes dashboards, a compilation of the contractors' and states' work, to monitor the progress of the measurement. The dashboards enable CMS to identify problems earlier in the measurement cycle and to provide assistance in resolving issues that could delay the measurement progress. The use of weekly all-contractor meetings has been employed to facilitate communication and problem solving between CMS and its contractors to improve the PERM process.

Process improvements, such as the medical record requests tracking web site and medical record intake quality assurance processing, were implemented and accessible during the entire FY08 cycle measurement period to assist with the collection of medical records from providers and resulted in a vast reduction of no documentation and insufficient documentation errors. States were instrumental, through a variety of provider outreach activities, in preparing their providers to meet PERM timelines for medical record submissions.

4.3 Reduce Cost and Burden

Since states administer the Medicaid program, the success of the PERM program depends on the cooperation of states. States must provide resources for data collection, policy identification and cooperation in review processes. States must commit staff time to provide quarterly universe data files from which to draw samples, claim details for sampled units and accurate provider

information so that medical records can be obtained for the medical reviews. For policy collection, states are required to assist with the identification of all policies governing Medicaid claims samples and quarterly policy updates for all changes to Medicaid programs. For data processing reviews, state need to cooperate and facilitate the data processing reviews by orienting reviewers to their claims processing systems and researching documentation when needed to support payment decisions. For medical reviews, state are required to provide provider education through outreach activities to assure timely record submission and to monitor all errors found, re-price partial errors and determine whether to dispute and/or appeal each error finding. For the eligibility reviews, states sample and review cases and report the findings to CMS. CMS continues to identify ways to reduce the cost and duplication of effort between the PERM eligibility component and the Medicaid Eligibility Quality Control Program (MEQC) that is administered parallel to PERM.

In addition to the time burden, states incur administrative costs. For Medicaid, states receive approximately a 50 percent match from the federal government for administrative expenses. As a result, states incur 50 percent of the costs associated with the PERM measurement. CMS will continue to identify opportunities to reduce the cost and burden on states.

4.4 Future Vision

One of the initiatives CMS is exploring is the development of a common set of data to support a number of federal and state data needs, being investigated during FY 2009 PERM program cycle. CMS is reviewing the data requirements to support the PERM program and comparing these data fields to data requirements to support, among others, the Medi-Medi and MSIS data requirements. The goal through this cross comparison is to develop a common set of data fields that would support CMS needs for multiple programs, thereby reducing the states' burden. An essential benefit of such standardization is to allow the states to collect the needed data in real time in order to meet the requirements with minimal workload impact.

CMS is also exploring the development of an eligibility measurement that will combine the requirements of Section 1903(u) of the Medicaid statute for MEQC and IPIA. The CHIPRA law requires CMS to review the requirements of the MEQC and PERM programs and coordinate the implementation of the requirements to reduce redundancies between the measurements. The goal for harmonizing PERM and MEQC is to allow one measurement to serve as both quality control and provide eligibility data for the PERM measurement. Harmonization would benefit states by reducing workload for conducting eligibility reviews, provide meaningful results for corrective actions, and allow CMS to recover identified erroneous payments based on Medicaid eligibility determinations.

5 Conclusions

Overall conclusions drawn from lessons learned and experiences in measuring FY 2008 states are:

- CMS understands that they need to work in partnership with states to accomplish the objectives of the PERM program.
- CMS PERM team improved communication with states which facilitated more accurate and timely data submissions and helped to complete the measurement on time.
- CMS PERM team identified problems earlier in the cycle which allowed for more timely resolutions.
- FY 2008 states were more successful due to more resources allocated to PERM efforts to inform providers and improve data collected. This contributed to improved provider awareness and vastly reduced documentation errors found in previous cycles.
- Significant variation in error rates were found between states. CMS needs to identify successful processes used by some states that resulted in lower error rates.

CMS appreciates the cooperation extended by the 17 states measured in FY 2008, and their commitment to safeguarding taxpayers' dollars by ensuring that Medicaid services are rendered and reimbursed accurately. CMS looks forward to continuing the partnership with these states in FY 2011.

Appendix A Methodology for State Selection

The FY 2008 error rate measurement is the result of claims reviewed from 17 selected states. The Centers for Medicare & Medicaid Services (CMS) developed a 17-state 3-year rotational approach to review the states under the Payment Error Rate Measurement (PERM) program. As a result, each state will be measured once every three years. The states selected for review in FY 2008 are listed in Table 22. These states will be reviewed again in FY 2011.

Table 22 State Selection for Medicaid FY 2008 Measurement

FY 2008	Alaska, Arizona, District of Columbia, Florida, Hawaii, Indiana, Iowa, Louisiana, Maine, Mississippi, Montana, Nevada, New York, Oregon, South Dakota, Texas, Washington

Appendix B Methodology for Sampling

Statistical Sampling and Formulae

The sampling process for PERM follows a stratified two-stage design. First, all 50 states plus the District of Columbia were stratified into three strata of 17 states each based on historical total Medicaid expenditures. The top strata consisting of the 17 states with the greatest expenditures were further divided into two strata: an eight state stratum of the largest expenditure states and a stratum with the remaining nine states. The states from each state stratum were selected through a random sample. States were selected to be reviewed on a three year rotation such that 17 different states would be reviewed each year and all states would be reviewed over a three year time span. This sampling of states constitutes the first stage of the sample. Within each sampled state, the universe of claims was stratified into five payment strata, based on the size of payments, and a Medicare payments stratum. The sampled claims were subjected to medical and data processing reviews to identify proper and improper payments. As a result of the reviews, state level error rates were calculated.

The state level error rate is estimated by this equation as:

$$\hat{R}_i = \frac{\hat{t}_{e_i}}{\hat{t}_{p_i}}$$

In the equation, $\hat{R}_i$ is the estimated error rate for state i; $\hat{t}_{e_i}$ is the estimated dollars in error projected for state i and $\hat{t}_{p_i}$ is the estimated total payments for state i. Then,

$$\hat{t}_{e_i} = \sum_{j=1}^{8} \frac{M_{i,j}}{m_{i,j}} E_{i,j}$$

and

$$\hat{t}_{p_i} = \sum_{j=1}^{8} \frac{M_{i,j}}{m_{i,j}} P_{i,j}$$

In these equations, $M_{i,j}$ is the number of items in the universe for state i in strata j and $m_{i,j}$ is the number of items in the sample for state I in stratum j. The ratio of items in the universe to items in the sample is the inverse of the sampling frequency. Dollars in error in the sample for stratum j and state i, denoted $E_{i,j}$, is weighted by the inverse of the sampling frequency to estimate dollars in error in the universe for that stratum. For example, if there are 10,000 items in the universe in stratum j, and the sample size in j is 100 items, the weight for the dollars in error in the stratum j sample is 100 (10,000/100). The estimated total dollars in error are then added across each of the eight strata to obtain total dollars in error for the universe. Total payments are estimated in the same way, where $P_{i,j}$ j is the total payments in the sample in stratum j for state i.

National Level Statistics

To go from the error rates for individual states to a national error rate, two steps are taken. First, states were, themselves, divided into four stratum based on the size of the state. For each of the four strata, there were some states that were sampled, and some that were not. In this step, the error rate for the entire state stratum is projected from the error rates of the states that were sampled in the stratum. The method is analogous to the method for the estimated state level error rates.

Let h represent the state strata, of which there are four, and n_h be the number of states sampled from stratum h. Then, the error rate for stratum h is given by:

$$\hat{R}_h = \frac{\hat{t}_{e_h}}{\hat{t}_{p_h}}$$

Where $\hat{t}_{e_h}$ is the total dollars in error projected for all the states (the universe) in stratum h, and $\hat{t}_{p_h}$ is the total projected payments for all of the states (the universe) in stratum h.

Total dollars in error for all the states in stratum h is projected by weighting the total projected dollars in error from the sampled states, which was calculated above for each state in the sample, by the inverse of the sampling frequency:

$$\hat{t}_{e_h} = \frac{N_h}{n_h} \sum_{i=1}^{n_h} \hat{t}_{e_{hi}}$$

In this equation N_h is the number of states in strata h, and n_h is the number of states in the sample that are in state stratum h. For example, if there are 17 states in stratum h, and the sample included 5 of those states, the total projected dollars in error for the universe of states in stratum h is the sum of the total projected dollars in error of each of the five states in h, weighted or multiplied by (17/5).

The analogous equation is used to project total payments in the stratum h universe:

$$\hat{t}_{p_h} = \frac{N_h}{n_h} \sum_{i=1}^{n_h} \hat{t}_{p_{hi}}$$

The error rate, for stratum h, is then the ratio of projected dollars in error to projected payments for that stratum, as defined above.

The final step in calculating the national error rate is to apply the state stratum rates to data on actual expenditures for the period of the estimate. The estimated national error rate is calculated as: $\hat{R} = \frac{\sum_{h=1}^{4} t_{p_h} \hat{R}_h}{t_p}$

where:

t_{p_h} = total universe payments for state stratum h

t_p = total universe payment

$\hat{R}_h$ =estimated error rate for stratum h

Note that there is no "^" over the state strata and national payment data. This means that they are not estimated from the sample. These are actual payment expenditures. Another way of considering the equation for the national error rate is to note that

$\frac{t_{p_h}}{t_p}$ = share of national expenditures represented by states in stratum h. Therefore, the national error rate has an intuitive interpretation as a weighted sum of the estimated state stratum error rates, where the weights are shares of expenditures.

Combining Claims Review Error Rates across Program Areas

Combining the claims review error rates, (i.e., combining the FFS and managed care error rate for Medicaid) is relatively straightforward given that population payments are known. Note that we do not utilize true population payments in calculating state rates for each program area. The reason for this is two-fold. First, the combined ratio estimator used allows for correction in possible bias if the sampled average payment amount differs from the universe average payment amount. However, if we utilized a combined ratio estimator to combine the program areas at the state level, one program area that realized high sample average payment amount compared to the universe average would have too much influence in projections. For this reason, combining program area rates using the shares of expenditures as weights reduces the variance in the estimates from this source. Furthermore, following this method allows the same method for combining program area claims review rates at both the state and national level.

The following equations utilize the estimated state or national error rates and variances calculated in the previous two sections.

Let the overall claims review error rate for Medicaid can be defined as:

$$\hat{R}_C = \frac{t_{p_{FFS}} \hat{R}_{FFS} + t_{p_{MC}} \hat{R}_{MC} +}{t_p}$$

where

$t_p = t_{p_{FFS}} + t_{p_{MC}}$. In this equations R is the error rate for FFS, managed care or combined (C), and t represents total payments for FFS, managed care or the total, depending upon the subscript.

Appendix C Eligibility Error Rate

Three strata were defined for active cases: new applications, redeterminations, and all other cases. A total of 504 cases were sampled from the active case universe and 204 cases from the negative universe. There were 14 cases sampled from each of three active strata (i.e., new applications, redeterminations, and 'all other' cases) and 17 cases sampled from the negative stratum each of the 12 months in the FY 2008 PERM cycle.

Claims data were associated with each of the cases. The dollar value of eligibility errors assessed was based on the implications of the eligibility review for the validity of the claims associated with the case. For each state, the results of review for each stratum were projected to the universe based on the sampling frequencies for that stratum, in a manner analogous to that described above for the FFS and managed care errors.

The sample sizes for both the active and negative case universe were calculated to achieve precision in the error rate estimate at the state level of +/- three percentage points with 95 percent confidence, under the assumption that the underlying error rate would be less than five percent.

A national eligibility error rate was calculated using the same method employed in the FFS and managed care calculations. It is based on calculating an eligibility error rate for each of the four state strata, and combining these rates into an overall national rate based on the share of expenditures for the program in each stratum.

Combining Claims Error Rates and the Eligibility Error Rate

After combining the FFS and managed care components of each program into one overall claims error rate for Medicaid at the state and national levels, these rates will then be combined with the respective eligibility error rates for each program. The combining of the claims review rate and the eligibility rate will be referred to as the combined error rate. The following procedure shall be followed at the state and national level. That is, the claims rate will be combined at the state rate and combined in a separate instance at the national level. The rates will not be combined once at the state level and then projected to a combined national figure. The variance for such a procedure would be extremely difficult to formulate. The estimated combine error rate is given by:

$$\hat{R}_T = \hat{R}_C + \hat{R}_E - \hat{R}_E \hat{R}_C$$

where

$\hat{R}_T$ denotes the estimated Total, or Combined Error Rate

$\hat{R}_C$ denotes the estimated Claims Error Rate

And

$\hat{R}_E$ denotes the estimated Eligibility Error Rate

Appendix D Claim Categories

Claim categories are listed in the table below.

Table 23 Claim Category Definitions

Claim Category Code	Claim Category Description
1	Inpatient Hospital
2	Psychiatric, Mental Health, and Behavioral Health Services
3	Nursing Facility, Intermediate Care Facilities (ICF) and ICF for the Mentally Retarded, Chronic Care Services
4	Outpatient Hospital Services, Practitioners, Clinics
5	Dental and Oral Surgery Services
6	Prescribed Drugs
7	Home Health Services
8	Personal Support Services
9	Hospice Services
10	Therapies, Hearing and Rehabilitation Services
11	Habilitation and Waiver Programs, Adult Day Care and Foster Care
12	Laboratory, X-ray and Imaging Services
13	Vision: Ophthalmology, Optometry and Optical Services
14	Durable Medical Equipment (DME) and supplies, Prosthetic/Orthopedic devices, and Environmental Modifications
15	Transportation and Accommodations
16	Denied Claims
17	Crossover Claims
30	Capitated Care/Fixed Payments
50	Managed Care
99	Unknown