U.S. GOVERNMENT ACCOUNTABILITY OFFICE
441 G St. N.W.
Washington, DC 20548

January 6, 2014

Congressional Committees

Medicaid: Use of Claims Data for Analysis of Provider Payment Rates

Within the Medicaid program, federal law requires that state Medicaid payments to providers be consistent with efficiency, economy, and quality of care; and be sufficient to enroll enough providers so that services are available to beneficiaries at least to the extent that they are available to the general population in the same geographic area.[1]

Two frequently cited studies of Medicaid payments have been conducted by the American Academy of Pediatrics (AAP) and the Urban Institute, both of which obtained state-specific fee schedule data for selected services and procedures through surveys of state Medicaid officials and from state websites.[2] These studies shed some light on potential Medicaid payments for selected services; however, they provide little information on the extent to which states vary their payment for a service based on the circumstances in which that service was provided—such as whether the state pays a different amount depending on characteristics of the provider, setting, or beneficiary. These studies also provide little information on how often the payment rates they selected from the fee schedules were actually used in practice. Without such information, it may be difficult for the Centers for Medicare & Medicaid Services (CMS)—the agency within the Department of Health and Human Services that oversees the joint federal-state Medicaid program—or other policy makers to fully assess the adequacy of Medicaid payments. One potentially useful source of more comprehensive information on provider payments is claims data. Assessing Medicaid fee schedules against Medicaid claims data can serve to cross validate both data sources, and provide new insights into the robustness of claims data for payment analyses.

We prepared this report under the authority of the Comptroller General to conduct work on GAO's initiative to assist Congress with its oversight responsibilities for the Medicaid program. In this report, we provide information on: (1) the extent to which state Medicaid programs vary the rates paid to providers for a given service and the basis for the variation; and (2) the extent to which Medicaid provider payment rates calculated from claims data confirm rates reported in studies of states' fee schedules.

Scope and Methodology

To conduct this work, we examined 2010 Medicaid fee-for-service (FFS) claims data for selected professional services and states. We selected 35 professional services from among those included in the studies by the AAP and the Urban Institute. The services were chosen to represent a range of professional service categories—including evaluation and management, imaging, laboratory, and maternal health. We selected 9 states from among the 26 states with available 2010 claims data as of October 2012. We chose states that represented different regions of the country and that served

[1]See 42 U.S.C. § 1396a(a)(30)(A).

[2]American Academy of Pediatrics, Medicaid Reimbursement Survey, 2010/11, American Academy of Pediatrics (Elk Grove, IL, 2011). Zuckerman S. et al., *Trends in Medicaid Physician Fees, 2003-2008*, (Washington, D.C.: Health Affairs, Vol. 28, No.3, 2009), w510-w519.

a relatively large proportion of their Medicaid population through FFS arrangements rather than through managed care.[3]

To determine the extent to which state Medicaid programs varied the rate they paid for a given service, we calculated the percentage difference between the 10th and 90th percentile of claims' payment rates. We excluded claims for beneficiaries in demonstration programs, claims where Medicaid was not the only payer, and claims that were adjusted. We performed a regression analysis to examine the extent to which variations in payments could be explained by differences in provider type, service setting, and patient age; and to determine the magnitude of variation associated with each factor. We selected these factors because previous studies by the Urban Institute found them to be present in fee schedules and they could be extracted from the claims data. To determine the extent to which Medicaid provider payment rates calculated from claims data confirmed rates reported in studies of states' fee schedules, we calculated median payment rates from the claims data and compared these to fee schedule rates reported by AAP and the Urban Institute. To help ensure comparability, we restricted the claims in this part of our analysis to those most comparable to the fees used by the AAP and the Urban Institute studies. Generally, this involved restricting those claims to the service provided by a physician or dentist, in an office, and to a child. To the extent that the rates calculated from claims data differed from the reported rates based on fee schedule data, we used information obtained from state Medicaid program websites to explore potential reasons for any differences we observed. A more detailed discussion of our scope and methodology can be found in enclosure 1. Tables detailing the results of our analysis can be found in enclosure 2.

We conducted our work from September 2012 to January 2014 in accordance with all sections of GAO's Quality Assurance Framework that are relevant to our objectives. The framework requires that we plan and perform the engagement to obtain sufficient and appropriate evidence to meet our stated objectives and to discuss any limitations in our work. We believe that the information and data obtained, and the analysis conducted, provide a reasonable basis for any findings and conclusions in this product.

Results in Brief

Among the states and services we examined, our analysis indicated that all states varied Medicaid payments for at least some services based on the circumstances under which the services were provided. However, the states differed in the number of services for which they varied payments, in the factors that accounted for variation, and in the magnitude of the variation. Many of the states varied payment rates by at least one of the factors we were able to explore in detail: provider type, service setting, and/or patient age. Some states also varied their payment rates for other reasons, such as by geographic region or by physician specialty. We also found that most of the median Medicaid payment rates calculated from claims data generally confirmed payment rates published in studies of fee schedules; however, some of the published fee schedule rates were rarely used in practice as the selected circumstance—such as the service being provided by a physician—rarely occurred. As a result, our findings demonstrate that Medicaid FFS claims data is a valid source of information on Medicaid provider payments, which have the potential to provide a more complete representation of provider payments than do fee schedules, as claims data can capture both the distribution and frequency of actual payments to providers.

[3]The nine states selected were Alabama, Iowa, Illinois, Louisiana, Montana, Nebraska, Pennsylvania, South Carolina, and Texas.

All States Varied Medicaid Provider Payment Rates for Some Services, but Reasons for Variation Differed

Among the states and services we examined, all states varied Medicaid provider payment rates for at least some services. However, the states differed in the number of services for which they varied payments, in the factors that accounted for variation, and in the magnitude of the variation. As shown in table 1, among the 9 states we examined, the most variation in payments was in Texas, where payments varied by more than 10 percent for 22 services, and by more than 50 percent for 7 services. The least variation in payments was in Nebraska and Pennsylvania, where payment rates varied by more than 10 percent for just 4 services. (See table 5 in enclosure 2 for more detail on the variation in provider payments for each state and service.)

Table 1: Number of Medicaid Services for Which States Varied Provider Payment Rates and Magnitude of Variation, by State, Calendar Year 2010

States included in analysis	Alabama	Iowa	Illinois	Louisiana	Montana	Nebraska	Pennsylvania	South Carolina	Texas
Number of services for which data were available	32	34	31	31	31	32	30	32	31
Number of services with variation greater than 10 percent	15	21	10	22	16	4	4	8	22
Number of services with variation greater than 25 percent	13	11	7	10	14	3	3	5	11
Number of services with variation greater than 50 percent	7	5	7	1	3	1	2	0	7

Source: GAO analysis of Centers for Medicare & Medicaid Services data.

Note: We selected 35 professional medical services from among those included in recent studies by the American Academy of Pediatrics and the Urban Institute. We chose these services to represent a range of professional medical service categories—including evaluation and management, imaging, laboratory, and maternal health. We determined the level of variation in payment by comparing the 90th and 10th percentiles of payment rates for all Medicaid claims for each service.

States also differed in the factors that contribute to payment rate variation and in the proportion of payment variation associated with each factor. In most states, some of the variation in payment rates could be explained by differences in provider type, service setting, and patient age. In 3 of the states with substantial variation in provider payment rates—Louisiana, Montana, and Texas—much of the variation could be accounted for by these 3 factors. For example, in Montana, more than half of the variation in payment rates could be explained by these factors in 56 percent of services. In 3 other states—Alabama, Iowa, and Illinois—very little of the variation in payment rates could be attributed to provider type, setting, and patient age. Less than 25 percent of the variation in payments was due to these factors in over 80 percent of services in these states. (See table 6 in enclosure 2 for more detail on the variation in Medicaid provider payment accounted for by provider type, service setting, and patient age for each service and state.) An examination of states' fee schedules indicated that states also varied their payment rates for reasons beyond the 3 factors we explored. For example, for certain services, Alabama varied payment rates by geographic region, Montana varied rates for certain services by provider specialty, and Illinois varied rates depending on whether providers were enrolled in a special primary health care program.

Furthermore, even among states that varied payments on the same factor, the states differed in the magnitude of the variation associated with that factor. For example, non-physicians were paid about 21 percent less than physicians on average in Louisiana, while they were paid about 8 percent less in Texas, according to our analysis of claims data. In Montana, services provided in a facility (inpatient hospital, outpatient hospital, or emergency department) were reimbursed about

32 percent less than those provided in an office, while in Louisiana, there was no difference in payment by setting. Payment rates for services provided to adults were generally less than for those provided to children, but the difference varied among states. On average, services provided to adults were reimbursed 12 percent less in Louisiana, 3 percent less in Montana, and 9 percent less in Texas.

Medicaid Provider Payment Rates Calculated from Claims Data Generally Confirmed Rates Reported in Fee Schedule Studies, but Some Rates Were Rarely Used

The median Medicaid payment rates calculated from claims data generally confirmed payment rates published in studies of fee schedules, once we restricted claims to those most comparable to the fees used by the studies.[4] Specifically, of the 257 state and service combinations for which we had both claims and fee schedule data, 148 (58 percent) had median claims payment rates that were within 1 percent of the published fee schedule rates, and another 71 (28 percent) had median payments within 10 percent. (See table 7 in enclosure 2 for the median payment rate calculated from claims data for each service and state. See table 8 in enclosure 2 for a comparison of the rates calculated in claims with those reported in studies of fee schedules for each service and state.)

Where the median payment rate calculated from claims data differed from that published in the fee schedule studies, we were generally able to identify the source of the difference. For example, for the two emergency department (ED) services shown in table 2, the AAP study reported fee schedule rates in Texas of $46 and $62. However, the current Texas fee schedule specifies that if the enrollee's diagnosis is nonemergency, Medicaid pays just 60 percent of the standard rate for these services. In that case, the rates for these services would be $28 and $37, which essentially equaled the median payment rates we calculated from the claims data. Thus, while the rate reported by AAP was consistent with the current Texas fee schedule, it did not reflect the number of ED visits in Texas that were paid at a reduced rate.

[4]Generally, this involved restricting the claims to the service provided by a physician or dentist, in an office, and to a child. (See table 4 in enclosure 1.)

Table 2: Percentage Difference between Medicaid Provider Payment Rates Calculated from Claims Data and Rates Reported in Fee Schedule Studies, Selected Services and States, Calendar Year 2010

	Percent difference between median claims payments and fee schedule rates								
Selected Medicaid Services	**Alabama**	**Iowa**	**Illinois**	**Louisiana**	**Montana**	**Nebraska**	**Pennsylvania**	**South Carolina**	**Texas**
Initial hospitalization, per day, moderate complexity	15	-	-1	13	-1	-1	2	-1	-
Subsequent hospitalization, per day, low complexity	20	-	-2	16	-	-2	-	-2	-
Subsequent hospitalization, per day, moderate complexity	-	-1	-	12	1	-1	-	-1	-1
Emergency department visit, problem focused	-	1	-1	18	-1	-1	1	-2	-69
Emergency department visit, expanded	-	1	-1	15	3	-1	-	-1	-66

Source: GAO analysis of Centers for Medicare & Medicaid Services, American Academy of Pediatrics (AAP), and Urban Institute data.

Notes: A positive value indicates that the median payment rate calculated from Medicaid claims data is higher than the payment rate presented in recent AAP and Urban Institute studies using fee schedule data. To help ensure comparability, we restricted the claims in this part of our analysis to those most comparable to the fees used by the AAP and the Urban Institute studies. Generally, this involved restricting those claims to the service provided by a physician or dentist, in an office, and to a child. (See table 4 in enclosure 1. See table 8 in enclosure 2 for data from all services included in our analysis.)

The difference between claims data and fee schedule rates for some services in Alabama may reflect differing rates for rural and non-rural areas, a factor we did not account for in our analysis. For example, for the initial hospitalization service, we calculated a median claims payment of $95, which is the rate shown in the current state fee schedule for rural areas. The AAP and Urban Institute both reported a payment rate of $81 for this same service, which is the rate shown in Alabama's fee schedule for non-rural areas. In the case of Louisiana, the difference between the median payment rates we calculated for children and the fee schedule rates reported by the AAP and Urban Institute appear to be due to the AAP having reported payment rates for adults for at least some services. The median payment rates that we calculated were consistent with the Louisiana fee schedule rates for children.[5]

We also examined how frequently the fee schedule rates reported in the AAP and Urban Institute studies were actually used to pay claims, and found that some were rarely used in practice. For example, the fee schedule rate reported by the Urban Institute in Texas for a CAT scan of the head or brain was $169.[6] However, that rate applied to fewer than 10 percent of actual payments for the service, and was less than half the $357 overall median payment for the service we calculated from claims data.[7] In Montana, the fee schedule rate for a 40 to 50 minute individual, face-to-face psychotherapy session reported by AAP was $90. However, this rate applied to fewer than 10 percent of the payments Montana made for the service, and it was nearly twice the overall median payment of $57 calculated from claims data. This discrepancy is likely due to AAP reporting the enhanced rate for psychiatrists over other physicians, while the much lower rate we found in the claims more closely corresponded to the rate paid to non-physician mental health providers.

[5]According to the Louisiana Medicaid fee schedule in effect from August 1, 2010 through November 30, 2010.

[6]The fee schedule rate reported by the Urban Institute was for services provided by a physician in an office.

[7]The overall median payment for a CAT scan of the head or brain in Texas—not limited to a specific provider type, setting, or beneficiary age—was $357 in 2010 as calculated from claims data. The median payment we calculated from claims data for services limited to those provided by a non-physician, in an office, and to a child was $174.

Agency Comments

The Department of Health and Human Services reviewed a draft of this report and provided technical comments, which we incorporated as appropriate.

– – – – –

For further information regarding this report, please contact me at (202) 512-7114 or YocomC@gao.gov. Copies of this report will be sent to the Secretary of Health and Human Services. In addition, the report will be available at no charge on the GAO website at http://www.gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Major contributors to this report were Christine Brudevold, Assistant Director; Eric Anderson; Alison Binkowski; William Black; Greg Dybalski; Nancy Fasciano; Sandra George; Drew Long; and Hemi Tewarson.

Carolyn L. Yocom
Director, Health Care

List of Congressional Committees

The Honorable Max Baucus
Chairman
The Honorable Orrin G. Hatch
Ranking Member
Committee on Finance
United States Senate

The Honorable Thomas Carper
Chairman
The Honorable Tom Coburn
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Fred Upton
Chairman
The Honorable Henry Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives

The Honorable Darrell E. Issa
Chairman
The Honorable Elijah Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives

Scope and Methodology

We prepared this report under the authority of the Comptroller General to conduct work on GAO's initiative to assist Congress with its oversight responsibilities for the Medicaid program. In this report, we provide information on: (1) the extent to which state Medicaid programs vary the rates paid to providers for a given service and the basis for the variation; and (2) the extent to which Medicaid provider payment rates calculated from claims data confirm rates reported in studies of states' fee schedules.

To conduct this work, we examined 2010 Medicaid fee-for-service (FFS) claims data for selected professional services and states. States submit Medicaid eligibility and claims data to the Centers for Medicare & Medicaid Services' (CMS) Medicaid Statistical Information System (MSIS) on a quarterly basis. We used 2010 claims data from the Medicaid Analytic Extract to calculate median payment rates for 35 services in 9 states. The Medicaid Analytic Extract (MAX) data is a set of person-level data files on Medicaid eligibility, service utilization, and payment, which are based on data extracted from the Medicaid Statistical Information System. The MAX data are created specifically to support research and policy analysis, and combine initial claims and adjustments for a given service into final action claims arrayed on a calendar year basis.[1] The payments in the MAX data represent the actual amounts Medicaid paid to providers and do not include beneficiary cost-sharing.[2] To assess the reliability of the claims data we used in our analyses, we reviewed related documentation, interviewed knowledgeable officials from CMS and its contractor responsible for processing these data, and compared our results to published sources.

We selected 35 professional services from among those included in the studies by the American Academy of Pediatrics (AAP) and the Urban Institute. Both studies relied on surveys of states' fee schedules. As part of its effort to monitor the impact of the Medicaid program on pediatrics, AAP has periodically conducted a survey of states to collect Medicaid fee schedule data. The most recent published survey requested payment rates effective July 1, 2010, and reported data from the 46 states that responded. For those states, the study reported on payment rates for 235 pediatric services and, with a few exceptions, reported the rate applicable when the service was provided by a physician, in an office, and to a child. Since 1993, the Urban Institute has conducted its study of Medicaid fee schedules approximately every 5 years. The authors shared unpublished results from their 2010 survey for our analysis. The Urban Institute study collected physician fee schedule data on 32 services for all 49 states that have a FFS program. The survey focused on rates for services provided by a physician in an office; if a state otherwise had multiple payment rates for the same service—for example, different rates for urban and rural areas—the authors reported the average of those rates. Together, the AAP and Urban Institute studies included 255 services—235 in the AAP study and 32 in the Urban study, with 12 appearing in both. From those 255 services, we selected 35 services across a range of professional service categories—including evaluation and management, imaging, laboratory, and maternal health. (See table 3.)

[1]We restricted our analysis to the MAX other claims file, which contains claims for physician and other outpatient services. We excluded three additional MAX claims files: inpatient hospital, long-term care, and prescription drugs.

[2]In some cases, states may require beneficiaries to pay deductibles, copayments and similar charges for certain Medicaid services. Federal law generally restricts such cost-sharing to nominal amounts; however, states may impose additional cost-sharing on certain populations and for certain services.

Table 3: Selected Services and Service Categories

Service Category	Appears in AAP	Appears in Urban	Service
Office visits	X		Established patient, problem-focused
	X	X	Established patient, low complexity
	X	X	Established patient, moderate complexity
	X	X	New patient, low complexity
	X	X	New patient, moderate complexity
Preventive services	X		One immunization administration
	X		Established patient, under 1 year
	X		Established patient, 1 through 4 years
Cardiovascular	X		Routine venipuncture
	X	X	Echocardiography, with image documentation
	X		Doppler echocardiograph
Emergency department/critical care	X		Emergency department visit, problem focused
	X	X	Emergency department visit, expanded
	X		Emergency department visit, detailed
Inpatient/non-emergency department	X	X	Initial hospitalization, per day, moderate complexity
	X		Subsequent hospitalization, per day, low complexity
	X	X	Subsequent hospitalization, per day, moderate complexity
	X		Subsequent hospitalization, per day, high complexity
Eye, ear, nose and throat		X	Ophthalmological services, new patient
		X	Ophthalmological services, established patient
	X		Screening test, hearing evaluation
Maternal/newborn care		X	Vaginal delivery only, no postpartum care
		X	Vaginal delivery and postpartum care
		X	Cesarean delivery and no postpartum care
Mental/behavioral health	X		Individual psychotherapy, 20-30 minutes face-to-face
	X		Individual psychotherapy, 45-50 minutes face-to-face
	X		Pharmacologic management
Pathology/laboratory	X		Urinalysis, non-auto., without microscopy
	X		Rapid Streptococcus screen
Radiology	X		Frontal chest x-ray
		X	X-ray, chest, two views
		X	CAT scan, head or brain
Dental	X		Periodic exam
	X		Prophylaxis, child
	X		Sealant, per tooth

Source: GAO analysis of Centers for Medicare & Medicaid Services, American Academy of Pediatrics (AAP), and Urban Institute data.

Note: We selected 35 professional services from among those included in the studies by the AAP and the Urban Institute. Together, the AAP and Urban Institute studies included 255 services—235 in the AAP study and 32 in the Urban Institute study, with 12 appearing in both.

We selected 9 states from among the 26 states with available 2010 MAX data as of October 2012. We chose states that represented different regions of the country and that served a relatively large proportion of their Medicaid population through FFS arrangements rather than through managed care. We first eliminated 2 states that were not included in the AAP or Urban Institute studies–Georgia and Tennessee. We then grouped states by Census region such that our sample represented a sizeable proportion of the total Medicaid enrollment. When selecting states within each region, we gave preference to states with higher enrollment. However, we also sought to ensure that the sample included states with relatively small as well as large enrollment. Given that our study focused on FFS rates, we gave preference to states that had higher percentages of enrollees—particularly higher percentages of children—in FFS arrangements, as opposed to comprehensive risk-based managed care arrangements. The 9 states we selected based on these criteria were Alabama, Illinois, Iowa, Louisiana, Montana, Nebraska, Pennsylvania, South Carolina, and Texas.

To determine the extent to which state Medicaid programs varied the rate they paid for a given service, we calculated the median payment amount and the percentage difference between the 10th and 90th percentile of claims payment rates (P90/P10) for each service.[3] To further explore this variation and examine the extent to which variations in payment could be explained by differences in provider type, service setting, and patient age, we performed a regression analysis.[4] Selected regression results are presented in table 6 in enclosure 2.[5]

To determine the extent to which Medicaid provider payment rates calculated from claims data confirmed rates reported in existing studies of states' fee schedules, we calculated median payment rates from the claims data and compared these to fee schedule rates reported by the AAP and the Urban Institute. To help ensure comparability, we restricted the claims in this part of our analysis to those most comparable to the fees used by the AAP and the Urban Institute studies. Generally, this involved restricting those claims to the service provided by a physician or dentist, in an office, and to a child. For 8 services for which we had fee schedule data from both the AAP and Urban Institute studies, we used the AAP rate in our analysis. See table 4 for fee schedule rates and claims restrictions used in the comparative analysis. To the extent that claims payments differed from fee schedule data, we used fee schedule information obtained from state Medicaid program websites to explore potential reasons for any differences we observed.

[3]To calculate payment rates from the claims for our selected services and states, we first identified claims in the MAX file that represented (1) FFS payment; (2) full, final payment; and (3) payment for services provided to the general Medicaid population. We developed criteria to exclude claims that did not meet these requirements. We excluded claims for beneficiaries in demonstration programs, claims where Medicaid was not the only payer, and claims that were adjusted.

[4]Specifically, our dependent variable was the log of the Medicaid payment rate and our independent variables were binary indicator variables for (i) whether the service was provided by a physician or dentist (reference category), non-physician, or other health professional; (ii) whether the service was provided in an office(reference category), facility (inpatient hospital, outpatient hospital, or emergency department), or other setting; and (iii) whether the service was provided to a child (reference category defined as less than 18 years old and basis of eligibility was child), adult (defined as greater than 21 years old and basis of eligibility was adult), or a patient of other/unknown age. By specifying a log-linear model, the resulting regression coefficients represent the percentage difference in mean payment rates associated with changing the specified independent variable.

[5]We only presented results where (i) there was sufficient variation in the dependent variable (which we defined as P90/P10 >= 1.1); (ii) there was sufficient variation in the independent variable (which we defined as N>=30 for each value of the indicator variable); and (iii) the r^2 of the regression was at least 0.25.

Table 4: Fee Schedule Rates and Claims Restrictions Used in Comparative Analysis

Service	Fee schedule rate used	Restrictions applied to claims[a]
Established patient, problem-focused	AAP	P-O-C
Established patient, low complexity	AAP	P-O-C
Established patient, moderate complexity	AAP	P-O-C
New patient, low complexity	AAP	P-O-C
New patient, moderate complexity	AAP	P-O-C
One immunization administration	AAP	P-O-C
Established patient, under 1 year	AAP	P-O-C
Established patient, 1 through 4 years	AAP	P-O-C
Routine venipuncture	AAP	P-O-C
Echocardiography, with image documentation	AAP	P-O-C
Doppler echocardiograph	AAP	P-O-C
Emergency department visit, problem focused	AAP	P-F-C
Emergency department visit, expanded	AAP	P-F-C
Emergency department visit, detailed	AAP	P-F-C
Initial hospitalization, per day, moderate complexity	AAP	P-F-C
Subsequent hospitalization, per day, low complexity	AAP	P-F-C
Subsequent hospitalization, per day, moderate complexity	AAP	P-F-C
Subsequent hospitalization, per day, high complexity	AAP	P-F-C
Ophthalmological services, new patient	Urban	P-O-C
Ophthalmological services, established patient	Urban	P-O-C
Screening test, hearing evaluation	AAP	P-O-C
Vaginal delivery only, no postpartum care	Urban	P-F-A
Vaginal delivery and postpartum care	Urban	P-F-A
Cesarean delivery and no postpartum care	Urban	P-F-A
Individual psychotherapy, 20-30 minutes face-to-face	AAP	P-O-C
Individual. psychotherapy, 45-50 minutes face-to-face	AAP	P-O-C
Pharmacologic management	AAP	P-O-C
Urinalysis, non-auto., without microscopy	AAP	NP-O-C
Rapid Streptococcus screen	AAP	NP-O-C
Frontal chest x-ray	AAP	NP-O-C
X-ray, chest, two views	Urban	NP-O-C
CAT scan, head or brain	Urban	NP-O-C
Periodic exam (dental)	AAP	P-O-C
Prophylaxis, child (dental)	AAP	P-O-C
Sealant, per tooth (dental)	AAP	P-O-C

Source: GAO analysis of Centers for Medicare & Medicaid Services, American Academy of Pediatrics (AAP), and Urban Institute data.

Note: For 8 services for which we had fee schedule data from both the AAP and Urban Institute studies, we used the AAP rate in our analysis.

[a]P = physician/dentist; NP = non-physician; F = facility (inpatient hospital, outpatient hospital, or emergency department); O = office; A = adult; C = child.

This enclosure includes the following detailed data tables:

Table 5-A: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Alabama, Iowa, and Illinois)

Table 5-B: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Louisiana, Montana, and Nebraska)

Table 5-C: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Pennsylvania, South Carolina, and Texas)

Table 6: Percent Difference in Medicaid Provider Payment Rates Accounted for by Provider Type, Service Setting, and Patient Age, Selected States and Services, Calendar Year 2010

Table 7: Median Medicaid Provider Payment Rates Calculated from Claims, Selected States and Services, Calendar Year 2010

Table 8: Percentage Difference between Medicaid Provider Payment Rates Published in Previous Studies Based on Fee Schedules and Rates Calculated from Claims Data, Selected States and Services, Calendar Year 2010

Table 5-A: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Alabama, Iowa, and Illinois)

	Alabama				Iowa				Illinois			
Service	**Median**	**P10**	**P90**	**P90/10**	**Median**	**P10**	**P90**	**P90/10**	**Median**	**P10**	**P90**	**P90/10**
Routine venipuncture	—	—	—	—	3	3	6	2.00	—	—	—	—
Vaginal delivery only, no postpartum care	1,041	950	1,250	1.32	759	759	759	1.00	924	924	924	1.00
Vaginal delivery and postpartum care	1,161	1,000	1,300	1.30	836	836	836	1.00	924	924	924	1.00
Cesarean delivery and no postpartum care	1,041	950	1,250	1.32	893	889	893	1.00	1,070	1,070	1,070	1.00
CAT scan, head or brain	158	158	273	1.73	199	196	199	1.02	247	247	247	1.00
Frontal chest x-ray	20	20	34	1.70	25	13	25	1.92	17	17	17	1.00
X-ray, chest, two views	23	23	23	1.00	32	27	32	1.19	22	22	22	1.00
Urinalysis, non-auto., without microscopy	3	3	3	1.00	4	3	8	2.67	3	3	3	1.00
Rapid Streptococcus screen	14	14	14	1.00	17	13	17	1.31	16	16	16	1.00
One immunization administration	5	5	5	1.00	7	4	17	4.25	—	—	—	—
Individual psychotherapy, 20-30 minutes face-to-face	47	47	47	1.00	33	33	55	1.67	68	28	68	2.43
Individual psychotherapy, 45-50 minutes face-to-face	71	71	71	1.00	86	77	87	1.13	68	68	102	1.50
Pharmacologic management	37	37	37	1.00	43	43	46	1.07	22	22	68	3.09
Ophthalmological services, new patient	84	75	84	1.12	96	65	96	1.48	46	37	46	1.24
Ophthalmological services, established patient	62	61	62	1.02	70	67	70	1.04	44	44	44	1.00
Screening test, hearing evaluation	16	10	16	1.60	14	14	14	1.00	20	15	32	2.13
Echocardiography, with image documentation	134	125	134	1.07	—	—	—	—	91	91	91	1.00
Doppler echocardiograph	71	71	106	1.49	88	78	116	1.49	20	20	40	2.00
New patient, low complexity	78	77	79	1.03	81	77	81	1.05	42	40	44	1.10
New patient, moderate complexity	111	110	113	1.03	117	114	117	1.03	68	64	70	1.09
Established patient, problem-focused	31	30	38	1.27	31	28	31	1.11	26	22	26	1.18
Established patient, low complexity	42	34	43	1.26	43	36	43	1.19	47	28	47	1.68
Established patient, moderate complexity	67	61	68	1.11	66	58	66	1.14	71	41	73	1.78
Initial hospitalization, per day, moderate complexity	95	81	145	1.79	106	98	106	1.08	51	51	51	1.00
Subsequent hospitalization, per day, low complexity	24	24	44	1.83	33	31	37	1.19	16	16	16	1.00
Subsequent hospitalization, per day, moderate complexity	40	40	72	1.80	51	50	55	1.10	25	25	25	1.00

	Alabama				Iowa				Illinois			
Service	**Median**	**P10**	**P90**	**P90/10**	**Median**	**P10**	**P90**	**P90/10**	**Median**	**P10**	**P90**	**P90/10**
Subsequent hospitalization, per day, high complexity	102	57	102	1.79	72	69	76	1.10	35	35	35	1.00
Emergency department visit, problem focused	21	21	21	1.00	29	29	29	1.00	24	24	24	1.00
Emergency department visit, expanded	42	42	42	1.00	59	59	59	1.00	32	32	32	1.00
Emergency department visit, detailed	66	66	66	1.00	90	90	90	1.00	44	44	44	1.00
Established patient, under 1 year	—	—	—	—	72	51	72	1.41	—	—	—	—
Established patient, 1 through 4 years	—	—	—	—	75	56	79	1.41	—	—	—	—
Periodic exam (dental)	18	18	18	1.00	18	16	19	1.19	28	28	28	1.00
Prophylaxis, child (dental)	28	28	28	1.00	23	21	26	1.24	41	41	41	1.00
Sealant, per tooth (dental)	26	26	26	1.00	20	17	23	1.35	36	36	36	1.00

Source: GAO analysis of Centers for Medicare & Medicaid Services' data.

Note: For each service, the table displays the median payment, payment rates at the 10th percentile (P10) and 90th percentile (P90), and the ratio of the 90th to the 10th percentiles (P90/P10).

Table 5-B: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Louisiana, Montana, and Nebraska)

	Louisiana				Montana				Nebraska			
Service	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**
Routine venipuncture	—	—	—	—	3	3	3	1.00	4	4	4	1.00
Vaginal delivery only, no postpartum care	581	522	653	1.25	831	831	866	1.04	810	806	810	1.00
Vaginal delivery and postpartum care	671	671	755	1.13	1,002	970	1,002	1.03	960	960	965	1.01
Cesarean delivery and no postpartum care	687	687	687	1.00	986	354	1,025	2.90	1,119	1,113	1,119	1.01
CAT scan, head or brain	160	153	167	1.09	—	—	—	—	197	197	198	1.01
Frontal chest x-ray	18	14	19	1.36	—	—	—	—	23	23	23	1.00
X-ray, chest, two views	23	20	25	1.25	—	—	—	—	30	30	31	1.03
Urinalysis, non-auto., without microscopy	3	2	3	1.50	4	4	4	1.00	4	4	4	1.00
Rapid Streptococcus screen	14	12	15	1.25	17	17	17	1.00	17	17	17	1.00
One immunization administration	15	15	15	1.00	16	14	16	1.14	6	6	6	1.00
Individual psychotherapy, 20-30 minutes face-to-face	50	50	50	1.00	41	41	41	1.00	35	35	35	1.00
Individual psychotherapy, 45-50 minutes face-to-face	76	76	76	1.00	57	57	58	1.02	64	64	64	1.00
Pharmacologic management	48	46	48	1.04	71	52	72	1.38	42	37	42	1.14
Ophthalmological services, new patient	107	85	107	1.26	96	65	112	1.72	35	35	55	1.57
Ophthalmological services, established patient	87	59	87	1.47	89	67	92	1.37	35	35	47	1.34
Screening test, hearing evaluation	7	6	7	1.17	10	10	10	1.00	13	13	13	1.00
Echocardiography, with image documentation	120	120	128	1.07	—	—	—	—	224	224	224	1.00
Doppler echocardiograph	63	53	63	1.19	65	65	75	1.15	106	106	106	1.00
New patient, low complexity	77	62	78	1.26	94	72	97	1.35	69	69	70	1.01
New patient, moderate complexity	118	101	121	1.20	147	118	152	1.29	104	102	104	1.02
Established patient, problem-focused	31	25	31	1.24	38	24	38	1.58	30	30	30	1.00
Established patient, low complexity	52	42	52	1.24	63	45	65	1.44	45	45	45	1.00
Established patient, moderate complexity	76	63	79	1.25	95	67	98	1.46	68	68	68	1.00
Initial hospitalization, per day, moderate complexity	103	89	107	1.20	130	130	131	1.01	83	83	84	1.01
Subsequent hospitalization, per day, low complexity	27	27	32	1.19	49	39	49	1.26	29	28	29	1.04
Subsequent hospitalization, per day, moderate complexity	49	49	58	1.18	71	70	88	1.26	45	45	46	1.02

	Louisiana				Montana				Nebraska			
Service	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**
Subsequent hospitalization, per day, high complexity	79	70	83	1.19	102	101	127	1.26	76	52	76	1.46
Emergency department (ED) visit, problem focused	35	29	35	1.21	41	41	42	1.02	34	34	34	1.00
ED visit, expanded	53	43	54	1.26	65	63	65	1.03	51	51	51	1.00
ED visit, detailed	84	84	101	1.20	119	119	122	1.03	60	60	61	1.02
Established patient, under 1 year	61	61	64	1.05	76	52	77	1.48	—	—	—	—
Established patient, 1 through 4 years	68	68	71	1.04	85	61	86	1.41	—	—	—	—
Periodic exam (dental)	—	—	—	—	23	23	23	1.00	17	17	17	1.00
Prophylaxis, child (dental)	—	—	—	—	33	33	33	1.00	21	21	22	1.05
Sealant, per tooth (dental)	—	—	—	—	26	26	26	1.00	—	—	—	—

Source: GAO analysis of Centers for Medicare & Medicaid Services' data.

Note: For each service, the table displays the median payment, payment rates at the 10th percentile (P10) and 90th percentile (P90), and the ratio of the 90th to the 10th percentiles (P90/P10).

Table 5-C: Distribution of Medicaid Provider Payment Rates, by State and Service, Calendar Year 2010 (Pennsylvania, South Carolina, and Texas)

	Pennsylvania				South Carolina				Texas			
Service	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**	**Median**	**P10**	**P90**	**P90/P10**
Routine venipuncture	—	—	—	—	2	2	2	1.00	—	—	—	—
Vaginal delivery only, no postpartum care	1,200	1,200	1,200	1.00	1,200	1,200	1,200	1.00	567	561	668	1.19
Vaginal delivery and postpartum care	1,200	1,200	1,200	1.00	—	—	—	—	689	656	746	1.14
Cesarean delivery and no postpartum care	1,200	1,200	1,200	1.00	1,200	1,200	1,200	1.00	674	667	700	1.05
CAT scan, head or brain	78	78	117	1.50	168	168	168	1.00	357	175	553	3.16
Frontal chest x-ray	12	11	19	1.73	18	18	18	1.00	27	19	69	3.63
X-ray, chest, two views	15	14	25	1.79	24	24	24	1.00	28	25	96	3.84
Urinalysis, non-auto., without microscopy	4	4	4	1.00	3	3	3	1.00	4	3	4	1.33
Rapid Streptococcus screen	6	6	6	1.00	15	15	15	1.00	16	16	17	1.06
One immunization administration	—	—	—	—	13	13	13	1.00	8	8	8	1.00
Individual psychotherapy, 20-30 minutes face-to-face	—	—	—	—	59	59	59	1.00	35	35	36	1.03
Individual psychotherapy, 45-50 minutes face-to-face	—	—	—	—	77	77	77	1.00	70	61	81	1.33
Pharmacologic management	—	—	—	—	45	37	45	1.22	45	42	46	1.10
Ophthalmological services, new patient	56	48	59	1.23	103	74	103	1.39	100	88	105	1.19
Ophthalmological services, established patient	45	43	45	1.05	84	75	84	1.12	86	65	86	1.32
Screening test, hearing evaluation	8	8	8	1.00	8	8	8	1.00	16	16	16	1.00
Echocardiography, with image documentation	139	137	140	1.02	136	136	136	1.00	122	115	161	1.40
Doppler echocardiograph	65	62	65	1.05	70	60	70	1.17	53	53	82	1.55
New patient, low complexity	54	51	54	1.06	74	59	74	1.25	61	55	62	1.13
New patient, moderate complexity	87	87	90	1.03	115	113	115	1.02	83	74	90	1.22
Established patient, problem-focused	26	24	26	1.08	29	27	29	1.07	25	23	25	1.09
Established patient, low complexity	35	33	35	1.06	50	40	50	1.25	38	34	38	1.12
Established patient, moderate complexity	51	51	54	1.06	75	73	75	1.03	52	47	53	1.13
Initial hospitalization, per day, moderate complexity	28	28	30	1.07	101	101	101	1.00	105	95	105	1.11
Subsequent hospitalization, per day, low complexity	16	16	17	1.06	30	30	30	1.00	35	31	35	1.13
Subsequent hospitalization, per day, moderate complexity	16	16	17	1.06	55	55	77	1.40	50	45	50	1.11

Service	Pennsylvania				South Carolina				Texas			
	Median	P10	P90	P90/P10	Median	P10	P90	P90/P10	Median	P10	P90	P90/P10
Subsequent hospitalization, per day, high complexity	17	16	17	1.06	79	79	110	1.39	67	61	68	1.11
Emergency department visit, problem focused	27	25	27	1.08	32	32	32	1.00	27	25	46	1.84
Emergency department visit, expanded	35	35	35	1.00	50	50	50	1.00	37	34	62	1.82
Emergency department visit, detailed	50	48	50	1.04	94	94	94	1.00	81	49	90	1.84
Established patient, under 1 year	20	20	20	1.00	—	—	—	—	—	—	—	—
Established patient, 1 through 4 years	20	20	20	1.00	—	—	—	—	—	—	—	—
Periodic exam (dental)	20	19	20	1.05	23	23	23	1.00	29	29	29	1.00
Prophylaxis, child (dental)	30	30	30	1.00	29	29	29	1.00	38	37	38	1.03
Sealant, per tooth (dental)	25	25	25	1.00	24	24	24	1.00	—-	—	—	—

Source: GAO analysis of Centers for Medicare & Medicaid Services' data.

Note: For each service, the table displays the median payment, payment rates at the 10th percentile (P10) and 90th percentile (P90), and the ratio of the 90th to the 10th percentiles (P90/P10).

Table 6: Percent Difference in Medicaid Provider Payment Rates Accounted for by Provider Type, Service Setting, and Patient Age, Selected States and Services, Calendar Year 2010

		Percent difference in payment rate[a]				
Services	State	Non-physician vs. physician	Facility vs. office	Adult vs. child	Percent of payment rate variation due to 3 factors	Mean payment rate[b]
Established patient, low complexity	Alabama	—	0.30	-0.01	0.46	41.84
Established patient, moderate complexity	Alabama	—	0.08	-0.01	0.27	67.09
Established patient, low complexity	Iowa	-0.15	0.02	-0.05	0.52	41.78
Established patient, moderate complexity	Iowa	-0.13	0.01	-0.03	0.30	64.16
Ind. psychotherapy, 20-30 minutes face-to-face	Illinois	—	-0.01	0.01	0.79	64.85
Pharmacologic management	Illinois	—	0.26	0.05	0.64	30.50
Vaginal delivery and postpartum care	Louisiana	-0.22	0.01	-0.03	0.37	678.37
Frontal chest x-ray	Louisiana	—	—	0.05	0.67	18.20
Doppler echocardiograph	Louisiana	—	—	-0.19	0.28	63.19
New patient, low complexity	Louisiana	-0.18	-0.01	-0.12	0.41	71.93
New patient, moderate complexity	Louisiana	-0.19	-0.02	-0.12	0.47	110.60
Established patient, problem-focused	Louisiana	-0.19	0.00	-0.16	0.69	29.04
Established patient, low complexity	Louisiana	-0.20	0.00	-0.17	0.61	48.56
Established patient, moderate complexity	Louisiana	-0.22	-0.02	-0.10	0.48	73.25
Initial hospitalization, per day, moderate complexity	Louisiana	-0.19	0.02	-0.14	0.56	98.97
Subsequent hospitalization, per day, low complexity	Louisiana	-0.20	0.00	-0.14	0.58	28.83
Subsequent hospitalization, per day, moderate complexity	Louisiana	-0.22	0.00	-0.12	0.52	52.31
Subsequent hospitalization, per day, high complexity	Louisiana	-0.23	-0.01	-0.12	0.33	75.28
Emergency department visit, problem focused	Louisiana	-0.22	—	-0.17	0.63	32.74
Emergency department visit, expanded	Louisiana	-0.21	—	-0.16	0.69	49.33
Emergency department visit, detailed	Louisiana	-0.22	—	-0.14	0.67	89.31
Pharmacologic management	Montana	-0.26	-0.19	0.00	0.83	65.86
New patient, low complexity	Montana	-0.04	-0.27	-0.03	0.88	89.00
New patient, moderate complexity	Montana	-0.06	-0.24	-0.02	0.81	140.69
Established patient, problem-focused	Montana	-0.03	-0.45	-0.03	0.95	34.14

Services	State	Percent difference in payment rate[a] Non-physician vs. physician	Facility vs. office	Adult vs. child	Percent of payment rate variation due to 3 factors	Mean payment rate[b]
Established patient, low complexity	Montana	-0.01	-0.32	-0.03	0.82	57.72
Established patient, moderate complexity	Montana	-0.04	-0.33	-0.03	0.77	89.59
Subsequent hospitalization, per day, low complexity	Montana	-0.11	—	-0.09	0.55	44.62
Subsequent hospitalization, per day, moderate complexity	Montana	-0.07	—	-0.02	0.32	73.58
Subsequent hospitalization, per day, high complexity	Montana	-0.05	—	-0.02	0.32	108.31
Established patient, under 1 year	Montana	-0.04	-0.39	—	0.73	67.45
Established patient, 1 through 4 years	Montana	-0.03	-0.34	—	0.64	76.17
CAT scan, head or brain	Pennsylvania	—	-0.36	-0.02	0.44	85.03
Frontal chest x-ray	Pennsylvania	—	-0.42	-0.01	0.44	12.84
X-ray, chest, two views	Pennsylvania	—	-0.44	-0.04	0.72	18.57
Pharmacologic management	South Carolina	—	-0.18	0.00	0.76	43.86
Doppler echocardiograph	South Carolina	—	—	-0.13	0.30	68.49
New patient, low complexity	South Carolina	-0.11	-0.28	-0.02	0.79	71.84
Established patient, low complexity	South Carolina	-0.14	-0.29	-0.02	0.76	48.76
Subsequent hospitalization, per day, high complexity	South Carolina	-0.23	—	-0.19	0.38	88.71
CAT scan, head or brain	Texas	—	0.79	0.00	0.31	377.67
Frontal chest x-ray	Texas	—	0.98	-0.05	0.75	38.55
X-ray, chest, two views	Texas	—	1.03	-0.05	0.78	48.59
New patient, low complexity	Texas	-0.06	-0.40	-0.11	0.76	58.46
New patient, moderate complexity	Texas	-0.08	-0.41	-0.11	0.79	82.23
Established patient, low complexity	Texas	-0.07	-0.38	-0.11	0.75	36.79
Established patient, moderate complexity	Texas	-0.08	-0.38	-0.11	0.74	50.36
Initial hospitalization, per day, moderate complexity	Texas	-0.08	—	-0.10	0.55	102.54
Subsequent hospitalization, per day, low complexity	Texas	-0.09	—	-0.10	0.87	33.70
Subsequent hospitalization, per day, moderate complexity	Texas	-0.08	—	-0.11	0.84	48.38

Services	State	Percent difference in payment rate[a]			Percent of payment rate variation due to 3 factors	Mean payment rate[b]
		Non-physician vs. physician	Facility vs. office	Adult vs. child		
Subsequent hospitalization, per day, high complexity	Texas	-0.09	—	-0.10	0.85	65.71

Source: GAO analysis of Centers for Medicare & Medicaid Services' data.

Note: Table includes only those services with payment variation of at least 10 percent between the 90th and 10th percentiles and where at least 25 percent of the variation could be explained by the 3 factors in our regression analysis—provider type (physician/dentist vs. non-physician), service setting (facility vs. office), and patient age (adult vs. child). Percentage difference in payment rate is shown as missing when there was insufficient variation in that factor (N < 30 for one or more values of the factor); services where all factors had insufficient variation were not included in the table. Facilities included inpatient hospital, outpatient hospital, and emergency department.

[a]The percent difference in payments are relative to the second value listed in the column. For example, a percentage difference of 0.30 in the facility vs. office column implies that the payment rate when the service was provided in a facility was, on average, 30 percent more than the rate when the service was performed in an office.

[b]The mean payment is the rate paid for services provided by a physician or dentist, in an office, and to a child.

Table 7: Median Medicaid Provider Payment Rates Calculated from Claims, Selected States and Services, Calendar Year 2010

Service	Alabama	Iowa	Illinois	Louisiana	Montana	Nebraska	Pennsylvania	South Carolina	Texas
Routine venipuncture	—	3	—	—	3	4	—	2	—
Vaginal delivery, no postpartum care	1041	759	924	581	831	810	1200	1200	567
Vaginal delivery and postpartum care	1161	836	924	671	1002	960	1200	—	663
Cesarean delivery, no postpartum care	1041	893	1070	687	986	1119	1200	1200	674
CAT scan, head or brain	158	199	247	160	—	197	117	168	174
Frontal chest x-ray	20	25	17	18	—	—	19	18	19
X-ray, chest, two views	23	32	22	23	—	30	25	24	25
Urinalysis, non-auto., without microscopy	3	4	3	3	—	—	4	3	4
Rapid Streptococcus screen	14	17	16	14	—	—	6	15	16
One immunization administration	5	7	—	—	16	6	—	13	8
Individual psychotherapy, 20-30 min	47	—	28	—	—	35	—	55	50
Individual psychotherapy, 45-50 min	71	—	48	—	—	64	—	77	70
Pharmacologic management	37	—	22	48	71	42	—	45	45
Ophthalmological services, new patient	84	96	46	107	130	45	59	103	104
Ophthalmological services, established patient	62	70	44	87	106	47	45	84	86
Screening test, hearing evaluation	16	14	—	—	10	13	8	8	16
Echocardiography	134	—	91	144	—	—	140	—	122
Doppler echocardiograph	71	88	20	63	65	106	65	70	53
New patient, low complexity	78	81	44	77	97	69	54	74	62
New patient, moderate complexity	111	117	70	118	152	104	90	115	90
Established patient, problem-focused	31	31	26	31	38	30	26	29	25
Established patient, low complexity	42	43	47	52	63	45	35	50	38
Established patient, moderate complexity	67	66	73	76	98	68	54	75	53
Initial hospitalization per day, moderate complexity	95	106	51	103	130	83	30	101	105
Subsequent hospitalization, per day, low complexity	30	33	16	32	39	28	17	30	35
Subsequent hospitalization, per day, moderate complexity	40	51	25	55	71	45	17	55	50
Subsequent hospitalization, per day, high complexity	102	72	35	79	102	76	17	110	68

Service	Alabama	Iowa	Illinois	Louisiana	Montana	Nebraska	Pennsylvania	South Carolina	Texas
Emergency department visit, problem focused	21	29	24	35	41	34	27	32	27
Emergency department visit, expanded	42	59	32	53	65	51	35	50	37
Emergency department visit, detailed	66	90	44	97	122	60	50	94	89
Established patient, under 1 year	—	72	—	61	77	—	20	—	—
Established patient, 1 through 4 years	—	76	—	68	85	—	20	—	—
Periodic exam (dental)	18	18	28	—	—	17	20	23	29
Prophylaxis, child (dental)	28	23	41	—	—	21	30	29	38
Sealant, per tooth (dental)	26	20	36	—	—	—	25	24	—

Source: GAO analysis of Centers for Medicare & Medicaid Services' data.

Notes: (1) To help ensure comparability, we restricted the claims in this part of our analysis to those most comparable to the fees used by the American Academy of Pediatrics and the Urban Institute studies. Generally, this involved restricting those claims to the service provided by a physician or dentist, in an office, and to a child. (See table 4 in enclosure 1.) (2) Missing data for a particular state and service could be due to (a) the states' Medicaid fee-for-service program never providing the service in the selected circumstances, or (b) limitations of the claims data that make it difficult to definitively identify all services that were provided in the selected circumstances.

Table 8: Percentage Difference between Medicaid Provider Payment Rates Published in Previous Studies Based on Fee Schedules and Rates Calculated from Claims Data, Selected States and Services, Calendar Year 2010

	Percentage Difference								
Services	**AL**	**IA**	**IL**	**LA**	**MT**	**NE**	**PA**	**SC**	**TX**
Routine venipuncture	—	-5%	—	—	0%	-10%	—	-29%	—
Vaginal delivery only, no postpartum care	9%	0%	0%	-12%	0%	0%	0%	0%	-2%
Vaginal delivery and postpartum care	1%	0%	0%	-12%	3%	0%	-35%		-2%
Cesarean delivery and no postpartum care	9%	0%	0%	-6%	0%	0%	0%	0%	-2%
CAT scan, head or brain	37%	0%	0%	7%	—	0%	0%	0%	3%
Frontal chest x-ray	0%	65%	0%	2%	—	—	0%	-4%	1%
X-ray, chest, two views	40%	2%	2%	0%	—	-2%	0%	-3%	2%
Urinalysis, non-auto., without microscopy	0%	10%	13%	4%	—	—	11%	-7%	12%
Rapid Streptococcus screen	0%	40%	2%	-6%	—	—	-5%	0%	-3%
One immunization administration	0%	28%	—	—	3%	3%	—	0%	0%
Individual psychotherapy, 20-30 minutes face-to-face	0%	—	2%	—	—	—	—	—	-1%
Individual psychotherapy, 45-50 minutes face-to-face	0%	—	1%	—	—	—	—	—	0%
Pharmacologic management	0%	—	-2%	—	20%	—	—	—	1%
Ophthalmological services, new patient	0%	0%	-1%	8%	-1%	-22%	0%	0%	1%
Ophthalmological services, established patient	0%	0%	-1%	8%	-2%	-1%	-1%	0%	2%
Screening test, hearing evaluation	69%	0%	—	—	2%	-2%	0%	0%	2%
Echocardiography, with image documentation	0%	—	0%	17%	—	—	0%	—	0%
Doppler echocardiograph	0%	74%	-99%	16%	1%	0%	0%	14%	-1%
New patient, low complexity	0%	1%	1%	16%	0%	-1%	0%	0%	1%
New patient, moderate complexity	0%	0%	0%	14%	0%	0%	0%	0%	0%
Established patient, problem-focused	0%	0%	1%	16%	-1%	1%	0%	-3%	0%
Established patient, low complexity	0%	0%	1%	16%	-4%	0%	0%	0%	1%
Established patient, moderate complexity	0%	0%	0%	14%	0%	0%	-1%	0%	0%
Initial hospitalization, per day, moderate complexity	15%	0%	-1%	13%	-1%	-1%	2%	-1%	0%
Subsequent hospitalization, per day, low complexity	20%	0%	-2%	16%	0%	-2%	0%	-2%	0%
Subsequent hospitalization, per day, moderate complexity	0%	-1%	0%	12%	1%	-1%	0%	-1%	-1%
Subsequent hospitalization, per day, high complexity	44%	0%	0%	12%	1%	0%	0%	28%	0%
Emergency department visit, problem focused	0%	1%	-1%	18%	-1%	-1%	1%	-2%	-69%
Emergency department visit, expanded	0%	1%	-1%	15%	3%	-1%	0%	-1%	-66%
Emergency department visit, detailed	0%	0%	0%	14%	3%	-1%	0%	-1%	-1%
Established patient, under 1 year	—	0%	—	-4%	1%	—	0%	—	—
Established patient, 1 through 4 years	—	-4%	—	-5%	0%	—	0%	—	—
Periodic exam (dental)	0%	10%	0%	—	—	0%	0%	-2%	-2%

Services	Percentage Difference								
	AL	IA	IL	LA	MT	NE	PA	SC	TX
Prophylaxis, child (dental)	0%	-6%	0%	—	—	-5%	0%	-3%	1%
Sealant, per tooth (dental)	0%	-1%	0%	—	—	—	0%	0%	—

Source: GAO analysis of Centers for Medicare & Medicaid Services, American Academy of Pediatrics (AAP), and Urban Institute data.

Note: A positive value indicates that the median payment rate calculated from Medicaid claims data is higher than the payment rate presented in recent AAP and Urban Institute studies using fee schedule data. To help ensure comparability, we restricted the claims in this part of our analysis to those most comparable to the fees used by the AAP and the Urban Institute studies. Generally, this involved restricting those claims to the service provided by a physician or dentist, in an office, and to a child. (See table 4 in enclosure 1.)

(291051)