
The Impact of Medicaid Adoption of the Medicare Fee Schedule

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In this article, the authors simulate the effects on Federal and State Medicaid expenditures of increasing Medicaid fees to Medicare fee schedule (MFS) levels. Strict adoption of the MFS by the States would increase total Medicaid spending by approximately 4 percent, \$2.5 to \$2.9 billion. Because Medicaid fees vary across States, so does the impact of adopting the MFS. Medicaid spending would increase significantly in some wealthy States with large Medicaid populations and in a few small, relatively poor States. Some States currently pay more than the MFS for obstetrical services. If these fees continued at higher levels for obstetrical care, total Medicaid spending would increase by \$3.5 to \$4.0 billion.

BACKGROUND

The levels of fees paid by State Medicaid programs to physicians have been a major policy issue for many years. It has been well documented that many States, particularly States in the East and Midwest, pay fees well below Medicare and private levels (Holahan, 1991). A large body of research indicates that low Medicaid fees result in low physician participation in the program and affect the number of Medicaid patients physicians are

willing to treat. It has been somewhat less clear whether these effects reduce overall access for Medicaid beneficiaries to services; that is, it appears that care in emergency rooms, outpatient departments, and clinics may substitute for reduced access to office-based physicians (Long, Settle, and Stuart, 1986). Nonetheless, questions have been raised about whether the lack of access to office-based physicians reduces the quality of care and perhaps increases costs as well.

The problem of limited physician participation in Medicaid has become increasingly important as Congress has enacted legislation to increase Medicaid coverage of pregnant women and children. Legislation, beginning with the Omnibus Budget Reconciliation Act (OBRA) of 1984, has resulted in increases in coverage of pregnant women and children. States are now required to cover pregnant women and infants in families with incomes below 133 percent of the poverty line. States are also now required to cover children under the age of eight and to increase coverage by 1 year until all children under the age of 18 are covered by the year 2002. Some observers have argued that expanding Medicaid eligibility is of little value if access to private physicians is limited. Thus, a number of proposals, including that of the Pepper Commission, specify that Medicaid fees should be raised to levels consistent with those paid by the Medicare program (Pepper Commission, 1990).

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Medicare has recently implemented a major reform of its approach to paying for physician services (*Federal Register*, 1991). The central element of the new physician payment reform is a fee schedule based on the resource costs of providing services. The result will be increases in Medicare fees for primary care services and reductions in fees for surgery, imaging, and other services. The implications are that many Medicaid programs could face rather large increases in fees, particularly for primary care, if they are to reach Medicare levels.

In this article, we provide estimates of the cost to each State of increasing Medicaid fees to levels under the new MFS. We use new information on Medicaid fees obtained from a recent survey as well as fee data from the recently published MFS. We also use new estimates of the effects of Medicaid fees on service utilization. We estimate the effect on Medicaid expenditures assuming the MFS had been adopted in 1990.

One previously published study attempted to estimate the increase in costs associated with an increase in Medicaid fees to Medicare levels. Using data from 1988, Thorpe, Siegel, and Dailey (1989) estimated that increasing Medicaid fees to Medicare payment levels in 1988 would have increased expenditures for physician services by \$2.3 billion but decreased expenditures for outpatient, emergency room, and clinic services by \$820 million—a net increase in Medicaid expenditures of \$1.5 billion.

These estimates were based on an increase in Medicaid fees to Medicare levels prior to the fee schedule. The Thorpe study relied on Medicaid and Medicare fee data for one fee—a “standard” physician office visit. The authors used esti-

mates from a study by Long, Settle, and Stuart (1986) to adjust for the expected increases in the use of physician care that would have accompanied the higher Medicaid fees. The Long study used data from the National Health Interview Survey to estimate the relationship between the Medicaid-Medicare fee ratio and the use of ambulatory care services by Medicaid enrollees. The study had the following two important results: (1) increases in Medicaid fees resulted in no effect on enrollees’ overall access to ambulatory care; and (2) higher fees increased usage of office-based physician services and reduced outpatient, emergency room, and clinic usage. Their estimate of the elasticity of private physician utilization with respect to fees was 0.3. That is, a 10-percent increase in fees resulted in a 3-percent increase in the use of physician services. The results also implied that the increase in physician visits was exactly offset by declines in outpatient, emergency room, and clinic services.

Our results differ from the Thorpe study in two significant ways. First, we relied on a survey conducted in 1990 of fees for 54 Medicaid procedures. We calculated the difference between Medicaid fees for these procedures in each State and Medicare payments under the new fee schedule for the same procedures. We calculated the values of Medicare fees under the fee schedule, assuming it had been introduced in 1990. We used the crosswalk provided in the *Federal Register* (1991) to convert the fee schedule’s 1992 procedure codes into 1990 procedure codes. Second, we used new estimates of utilization responses to physician fee changes that relied on a large sample of Medicaid beneficiaries using 1988 Tape-

to-Tape data from Michigan, Georgia, and Tennessee (Wade, 1992). These estimates of changes in utilization covered a wide range of services, e.g., hospital admissions, surgeries, and ancillary services.

The main results of this research are that strict adoption of the MFS would lead to increases in Medicaid spending of \$2.5-\$2.9 billion (3.9 percent and 4.4 percent, respectively) depending on the impact of the fee increase on volume. If States adopted the MFS with variations, the costs would be different. For example, Medicaid obstetrical fees are higher than the Medicare fee schedule amounts in all but 16 States. If States keep their obstetrical fees above Medicare levels to encourage access to obstetrical care for Medicaid beneficiaries, the costs would increase by an additional \$1.0 billion. On the other hand, if Medicaid programs are required to pay only 90 percent of the MFS, Medicaid expenditures would only increase by \$1.8-\$2.0 billion (2.8 percent and 3.1 percent, respectively).

All these estimated increases are larger than the Thorpe estimates for three reasons. First, our estimates are based on 1990 data: Medicaid expenditures increased by approximately 20 percent from 1988 to 1990. Thus, our expenditure-increase estimates are relative to a significantly larger base. Second, Thorpe estimated the effects of increasing Medicaid fees relative to Medicare under the previous Medicare payment system. The MFS will significantly increase fees for most primary care services; Medicaid fees for these services have tended to be low relative to other services. Because primary care services are so important in the Medicaid market basket, adopting the MFS would have a substantial effect in most States. The reductions in most surgery

fees by Medicare would have less of an impact, because there would be less of a change in Medicaid fees for these services and because surgical procedures are of less importance to Medicaid patients. Third, we used evidence that there would in fact be a positive behavioral response to a Medicaid fee increase. The behavioral response evidence indicates that increasing Medicaid fees would have a positive effect on access to most physician services, hospital outpatient care, and prescription drugs. There is also evidence of an offsetting effect of declining inpatient surgery and hospital days for children. Because the evidence indicates that the net effect of increasing Medicaid fees would be to increase access and utilization, we estimate that the cost of the Medicaid fee increase would be higher than previous studies have estimated.

METHODS

Our analysis relied on data from a new survey of Medicaid physician fees (Holahan, 1991). The survey collected fee information from all States for fiscal year 1990 on 54 different physician services.¹ We attempted to collect fee data on services that are representative of the market baskets consumed by different types of Medicaid recipients—infants, young children, women in their childbearing years, older male and female adults, and the disabled.² The large number of services included in our survey permitted us to develop comparisons among Medicaid, Medicare, and private payers for different

¹A list of the procedures is available upon request from the authors.

²The survey procedures accounted for more than one-half the expenditures for infants, individuals under the age of 19, and the disabled. The procedures are somewhat less representative for older males and females.

population groups and for different types of services, such as primary care, hospital visits, obstetrical care, surgery, laboratory tests, and imaging. Medicaid fees were compared with both Medicare-allowed and Medicare-prevailing charges (using data from the Part B Medicare Annual Data procedure and prevailing charge files) and with private payers (using data from the Health Insurance Association of America). Expenditure weights derived from Medicaid claims in the Health Care Financing Administration (HCFA) Tape-to-Tape data were used to create fee indexes that account for the relative differences across procedures. Data for the 54 survey procedures from California, Georgia, Michigan, and Tennessee were used to compute the weights.

The dominant finding of the analysis is extreme variation across the country in how well Medicaid programs pay for physician services. Some States pay extremely well by the standards of Medicare and even private payers. Others pay very poorly. The results are shown in Table 1. Medicaid fees, after adjusting for the cost of physicians' practice (column 2), vary by a factor of more than 3. Many of the States with relatively high physician fees are smaller States in the South and West; many of the States with low fee policies are large industrialized States. We found that, on average, Medicaid fees for surgery services, obstetrical care, and imaging tend to be higher than for office visits and laboratory tests relative to Medicare and private fees. Medicaid fees for surgical procedures are high relative to Medicare fees but relatively low compared with private fees. This is probably because Medicare in recent years has limited the rates of growth in Medicare surgical fees.

Estimating the impact of a fee increase on Medicaid expenditures requires knowledge of the effect of fee increases on access and utilization. The literature indicates that Medicaid enrollees' utilization of services is related to Medicaid fee levels (Long, Settle, and Stuart, 1986; Cohen, 1989 and 1991). We use Wade's (1992) estimated models of Medicaid service utilization to account for the effects of fee levels on service utilization.

Wade estimates a linear model of services per enrollee. The model's independent variables are: the weighted average ratio of 1988 Medicaid fees to private charges, per capita income, the ratio of Medicaid enrollees to total population, the number of primary care physicians per capita, the number of hospital beds per capita, occupancy rates, the proportion of teaching beds, and the proportion of public beds. The model also controls for enrollees' age, sex, race, enrollment category, length of enrollment, and whether the enrollee is in a fee-for-service managed care program. The analysis also controls for enrollees' State of residence and whether the enrollees' county of residence is urban or rural. The State indicator variables control for numerous factors, including State Medicaid policies.

The model is estimated for several categories of service: physician office visits, clinic visits, hospital outpatient department visits, hospital inpatient services, surgical procedures, prescription drug use, and radiology and laboratory services. The models are estimated separately for non-institutionalized children and adults, excluding the blind, the disabled, and the elderly.

The analysis of enrollee utilization uses data for Georgia, Michigan, and Tennessee extracted from HCFA's 1988 Tape-to-

Table 1

Variation in Average Medicaid Fees, All Services, by State: United States, Fiscal Year 1990

State	Ratio of State Medicaid Maximum Fees to National Average Medicaid Fees		Ratio of Medicaid Maximum Fees to		
	Unadjusted	Adjusted for Cost of Physician Practice ¹	Medicare Allowed Charges	Medicare Prevailing Charges	Private Fees
All	1.00	1.00	0.85	0.74	0.65
Alabama	1.14	1.23	0.80	0.71	0.64
Alaska	1.35	0.97	1.14	0.99	0.94
Arkansas	0.98	1.14	1.17	1.05	0.80
California	1.04	0.85	0.59	0.52	0.49
Colorado	1.09	1.07	0.94	0.84	0.64
Connecticut	1.06	0.95	0.65	0.54	0.45
Delaware	0.73	0.66	0.74	0.65	0.52
District of Columbia	1.14	0.91	0.62	0.55	0.44
Florida	1.17	1.15	0.86	0.73	0.66
Georgia	1.58	1.72	1.12	0.96	0.83
Hawaii	0.92	0.84	0.82	0.73	0.63
Idaho	1.37	1.46	0.98	0.84	0.78
Illinois	0.82	0.72	0.68	0.55	0.55
Indiana	1.17	1.22	1.25	1.07	1.00
Iowa	1.06	1.13	1.02	0.96	0.77
Kansas	0.97	1.05	0.85	0.74	0.65
Kentucky	0.92	0.99	0.83	0.71	0.69
Louisiana	1.11	1.14	1.05	0.95	0.85
Maine	0.90	1.01	0.69	0.59	0.56
Maryland	1.07	0.93	0.56	0.46	0.54
Massachusetts	1.49	1.37	0.98	0.85	0.70
Michigan	0.64	0.55	0.71	0.66	0.56
Minnesota	1.02	1.01	1.04	0.88	0.71
Mississippi	0.74	0.84	0.74	0.69	0.56
Missouri	0.67	0.70	0.68	0.56	0.49
Montana	0.89	0.96	0.89	0.73	0.64
Nebraska	0.99	1.13	1.13	1.00	0.96
Nevada	1.48	1.29	0.87	0.73	0.76
New Hampshire	1.11	1.18	0.81	0.73	0.61
New Jersey	0.59	0.50	0.47	0.40	0.33
New Mexico	0.65	0.67	0.86	0.74	0.59
New York	1.03	0.85	0.32	0.29	0.28
North Carolina	1.09	1.22	0.92	0.78	0.68
North Dakota	0.85	0.93	0.89	0.79	0.68
Ohio	0.64	0.64	0.65	0.54	0.58
Oklahoma	1.00	1.10	0.86	0.76	0.68
Oregon	1.10	1.10	0.79	0.72	0.59
Pennsylvania	0.56	0.54	0.61	0.53	0.46
South Carolina	0.97	1.08	1.00	0.85	0.76
South Dakota	0.87	1.02	1.10	0.91	0.76
Tennessee	0.97	1.07	1.07	0.93	0.81
Texas	1.25	1.15	1.07	0.95	0.88
Utah	0.83	0.84	1.01	0.85	0.67
Vermont	0.98	1.13	0.73	0.60	0.57
Virginia	1.27	1.28	1.09	0.95	0.71
Washington	0.96	0.89	0.75	0.67	0.57
West Virginia	0.74	0.81	0.41	0.34	0.36
Wisconsin	0.85	0.87	0.81	0.69	0.62
Wyoming	1.12	1.15	1.25	1.02	0.84

¹This deflation is based on the Geographic Practice Cost Index using the full value of physician's work.

SOURCE: Urban Institute tabulations of Urban Institute Survey of Medicaid Physician Fees, Health Insurance Association of America's Prevailing Healthcare Charges System, and Part B, Medicare Annual Data.

Tape data to measure service utilization.³ The Tape-to-Tape data consist of individual claims for all services provided to all Medicaid enrollees in the participating States, approximately 1 million children and 0.5 million adults.

The estimated coefficients of the model of physician office visits are generally consistent with theoretical expectations. For example, from Sloan, Cromwell, and Mitchell's (1978) model of physician participation, the expectations are that use of physician services should be positively related to the Medicaid fee index, inversely related to private demand, and positively related to physician supply. Wade's empirical results are generally consistent with these expectations and are statistically significant.

Wade's analysis has several strengths. For example, the large sample size permits greater precision in estimating the effects of Medicaid fee levels than has been possible previously. Moreover, the data report information on all services used by Medicaid enrollees. Wade's analysis also addresses some methodological limitations of prior literature, such as Long, Settle, and Stuart's (1986) omission of supply variables. However, Wade's analysis has two potential limitations that should be noted. First, the analysis is based on data from only three States. However, the estimated models use binary indicator variables to control for State effects. Second, the analysis may be limited by its use of utilization as a measure of Medicaid enrollees' access. A positive relationship between Medicaid fee levels and utilization could suggest that enrollees overutilize services. In gen-

eral, however, increases in utilization probably reflect improvements in access for this population.

The basic results of Wade's analysis are summarized in Table 2. Higher physician fees are associated with an increase in the number of physician office visits per enrollee. There is also an increase in clinic services for adults but no statistically significant difference for children. The results also indicate that hospital outpatient department visits are positively related to Medicaid fee levels, though the result is not statistically significant for adults. The positive impact presumably reflects the fact that outpatient departments are not simply substitutes for physicians' offices, they are also complements, e.g., providing specialist services or diagnostic procedures.

For children, higher fees are associated with less inpatient surgery but more outpatient surgery. For adults, both inpatient and outpatient surgery are positively related to physician fees. Increasing fees has a negative effect on the number of

Table 2
Estimated Elasticities of Services per Enrollee with Respect to Medicaid Fee Index

Services	Children	Adults
Physician Office Visits	**0.22	**0.22
Clinic Visits	0.21	**0.78
Hospital Outpatient Department Visits	**0.63	0.09
Other Physician Services	1** -0.57	1*0.18
Hospital Discharges	-0.07	0.06
Inpatient Physician Visits	0.06	0.22
Hospital Days	**0.47	0.04
Inpatient Surgery	** -0.86	**0.38
Outpatient Surgery	**0.34	**0.42
Prescription Drugs and Refills	**0.43	**0.36
Laboratory and X-ray Services	1** -0.26	1** -0.41

¹These elasticities represent changes in expenditure levels, not in the amount of service received.

*Statistically significant at the .10 level.

**Statistically significant at the .05 level.

SOURCE: (Wade, 1992).

³Data from California, another of the Tape-to-Tape States, is omitted because it does not contain information on enrollees' race.

hospital discharges and days per enrollee for children but not for adults. This is consistent with the negative effect on inpatient surgery for children. Additionally, higher fees are associated with lower expenditures on laboratory and X-ray services. (The Tape-to-Tape data did not permit aggregation across laboratory and X-ray services to obtain a count of services per enrollee; instead, estimates of expenditures per enrollee were made.) Finally, higher physician fees are positively associated with the number of prescriptions per enrollee. The results imply that higher physician fees are associated with an increase in access for Medicaid recipients and some increase in overall utilization.

The results of the estimated model of services per enrollee were used to simulate the impact of an increase in Medicaid fees to MFS levels. The simulations compute total expenditures under the fee schedule using the following equation:

$$E_{i1} = E_{i2}(1 + \tilde{q}_i)(1 + \tilde{\rho}_i)$$

where

- E_{i1} is Medicaid expenditures in State i at MFS levels.
- E_{i2} is Medicaid expenditures in State i at actual 1990 Medicaid fee levels.
- $\tilde{\rho}_i$ is the percent change in the Medicaid fee index in State i associated with increasing fees to MFS levels.
- \tilde{q}_i is the percent change in services per enrollee in State i , $\tilde{q}_i = \tilde{\rho}_i \varepsilon$.
- ε is the elasticity of services per enrollee with respect to the Medicaid fee index.

Baseline Medicaid expenditure data for each State were taken from the HCFA-2082 reports; expenditures from that data set were adjusted as necessary

to be consistent with the HCFA-64 reports. These calculations were made for physician services, hospital inpatient care, hospital outpatient care and clinics, and prescription drugs. Estimates were made only for children, adults, the blind, and the disabled; it is assumed that the aged will be unaffected because Medicaid primarily pays only Medicare deductibles and coinsurance. We did not have utilization equations for the blind and the disabled; we therefore used the elasticity estimates for adults. This may cause some bias in the results, though the direction is unclear.

The estimates of the impact of Medicaid fees on utilization are based on a sample of three States. The ratio of Medicaid fees to private fees ranged from 0.66 to 1.00. Because some States had Medicaid-to-private-fee ratios below the bottom of this range, we are reluctant to rely solely on extrapolations from our elasticity estimates to the experience of all States. Thus, we present alternative results based on somewhat arbitrary limits on the impact of the fee increase on volume. That is, we assumed there would be no further behavioral response beyond a specified increase in fees. (The limits apply only to the volume response; the full fee increase is assumed.) We used three assumptions: the first, that there would be no response beyond that implied by a 33-percent increase in fees; the second, that there would be no response beyond that implied by a 50-percent increase in fees; finally, that utilization would continue to respond no matter how great the fee increase.

The effects of increasing Medicaid fees to the level specified by the MFS, assuming that it was adopted in 1990, are shown in Table 3. We also present three alterna-

tive approaches to moving toward the MFS. The first uses the Medicare fee schedule as a floor, permitting States to pay more generously if they currently do so. The second requires States to use the MFS but permits them to pay their current rates for obstetrical care if they currently pay more than Medicare. Given the high level of interest in getting access for Medicaid recipients to obstetrical care, it may be important to permit States to continue to pay amounts higher than the Medicare levels for these services. The third alternative, a more frugal approach, requires States to pay only 90 percent of the MFS. All percentage increases in costs are relative to Medicaid expenditures in 1990, assuming the fee schedule had been adopted in that year. To arrive at MFS amounts in 1990, we used the 1991 conversion factor provided in the *Federal Register* (1991) rather than the conversion factor actually used in 1992; this generated 1991 MFS fees that were then deflated by the Medicare Economic Index update factor (2.0 for primary care services; 0 for other services).

The results indicate that requiring Medicaid programs to adopt the MFS would

result in increases of \$2.5-\$2.9 billion—3.9 percent to 4.4 percent. (The results vary with the behavioral response limits assumed; the high estimate is probably unrealistic.) If Medicaid programs were permitted to continue to pay more than the MFS amounts (if they are already doing so), while bringing other fees up to the levels of the MFS, the increase in expenditures would range from \$3.5 to \$4.0 billion. The third alternative, permitting States to continue to pay more than the MFS amounts for obstetrical services, would reduce expenditures slightly, compared with the second alternative. Expenditures would increase by \$3.4-\$3.9 billion. The differences between the second and third alternatives are not large, primarily because obstetrical services are the most important set of procedures that are consistently higher than the MFS. For the final alternative, requiring Medicaid to pay 90 percent of the MFS, the results show that the increase in Medicaid expenditures would range from \$1.8 to \$2.0 billion—2.8 percent to 3.1 percent—depending on the response limit chosen.

Table 4 shows results by State for the first option, strict adoption of the Medi-

Table 3
Increases in Medicaid Expenditures Under Alternative Fee Policies, Using Alternative Assumptions of Behavioral Response

Policy	Increase in Medicaid Expenditures in Billions with 33 Percent Cap	Percent Increase in Medicaid Expenditures with 33 Percent Cap	Increase in Medicaid Expenditures in Billions with 50 Percent Cap	Percent Increase in Medicaid Expenditures with 50 Percent Cap	Increase in Medicaid Expenditures in Billions with No Cap	Percent Increase in Medicaid Expenditures with No Cap
Medicaid Adopts MFS	\$2.5	3.9	\$2.6	4.0	\$2.9	4.4
Medicaid Uses MFS As a Floor	3.5	5.4	3.6	5.5	4.0	6.1
Medicaid Adopts MFS Except for Obstetrics	3.4	5.2	3.5	5.3	3.9	5.9
Medicaid Pays 90 Percent of MFS	1.8	2.8	1.9	2.9	2.0	3.1

NOTE: MFS is Medicare fee schedule.

SOURCE: Urban Institute simulations.

Table 4

Percent Increase in Medicaid Expenditures, by State and Nation for Children, Adults, the Blind, and the Disabled (Behavioral Response Capped at 50 Percent)

State	Spending in Millions on Affected Services, 1990	Total Medicaid Spending in Millions, 1990	Increase in Spending in Millions on Affected Services, 1990	Percent Increase Relative to Current Spending on Affected Services	Percent Increase Relative to Total Spending on All Groups
AI	\$27,569.9	\$85,530.0	\$2,621.1	9.5	4.0
Alabama	367.3	745.2	18.1	4.9	2.4
Alaska	85.5	151.7	-2.6	-3.0	-1.7
Arkansas	242.5	594.3	2.0	0.8	0.3
California	3,657.4	6,432.2	467.6	12.8	7.3
Colorado	192.0	521.2	18.4	9.6	3.5
Connecticut	251.1	1,195.6	16.3	6.5	1.4
Delaware	45.2	124.5	3.3	7.4	2.7
District of Columbia	190.8	391.9	15.5	8.1	4.0
Florida	1,195.4	2,384.6	36.8	3.1	1.5
Georgia	799.9	1,532.7	4.1	0.5	0.3
Hawaii	80.7	200.3	6.4	8.0	3.2
Idaho	56.5	154.2	3.3	5.9	2.2
Illinois	1,072.5	2,337.4	153.3	14.3	6.6
Indiana	541.5	1,361.8	3.2	0.6	0.2
Iowa	246.7	610.1	19.5	7.9	3.2
Kansas	176.4	478.6	19.0	10.8	4.0
Kentucky	516.1	986.2	58.6	11.4	5.9
Louisiana	663.8	1,362.0	11.3	1.7	0.8
Maine	125.1	418.1	21.2	17.0	5.1
Maryland	560.9	1,105.6	83.3	14.9	7.5
Massachusetts	1,054.2	3,046.5	14.6	1.4	0.5
Michigan	1,300.8	2,436.0	180.9	13.9	7.4
Minnesota	348.1	1,416.8	2.5	0.7	0.2
Mississippi	317.3	592.9	86.8	27.4	14.6
Missouri	342.9	862.4	31.6	9.2	3.7
Montana	69.9	187.7	6.1	8.7	3.2
Nebraska	110.8	307.1	4.5	4.0	1.5
Nevada	68.7	144.8	1.2	1.7	0.8
New Hampshire	42.9	220.4	4.5	10.4	2.0
New Jersey	933.8	2,360.2	138.5	14.8	5.9
New Mexico	149.7	288.1	14.3	9.6	5.0
New York	4,098.5	12,030.8	593.5	14.5	4.9
North Carolina	623.1	1,466.2	31.6	5.1	2.2
North Dakota	54.6	197.9	3.3	6.0	1.7
Ohio	1,352.5	3,111.4	127.3	9.4	4.1
Oklahoma	276.5	697.3	15.6	5.6	2.2
Oregon	175.2	501.3	16.6	9.5	3.3
Pennsylvania	861.6	2,822.1	138.1	16.0	4.9
South Carolina	412.3	834.1	14.5	3.5	1.7
South Dakota	60.2	167.4	2.6	4.3	1.5
Tennessee	857.9	1,388.3	31.2	3.6	2.2
Texas	1,339.8	2,974.6	-7.4	-0.5	-0.2
Utah	129.1	259.1	13.9	10.8	5.4
Vermont	50.3	151.2	8.3	16.5	5.5
Virginia	403.9	1,014.9	22.9	5.7	2.3
Washington	513.3	1,200.2	70.0	13.6	5.8
West Virginia	177.8	395.4	55.8	31.4	14.1
Wisconsin	339.8	1,300.5	38.5	11.3	3.0
Wyoming	37.3	66.5	0.5	1.4	0.8

SOURCE: Urban Institute simulations.

care fee schedule. To simplify the presentation, we show the case of no behavioral response beyond a 50-percent increase in fees. The first column indicates the level of 1990 Medicaid spending on the services we assume to be affected by Medicaid fee changes. These are physician services, hospital inpatient and outpatient care, and prescription drugs for children, non-elderly adults, the blind, and the disabled. Unaffected services include nursing home care, home health care, dental services, and so forth. We also assume that all services used by the elderly are unaffected because of Medicare coverage. The second column presents total Medicaid spending for all services for all groups in each State. The third column contains our projected change in expenditures following adoption of the MFS. The fourth column shows the projected percent increase relative to current spending on the affected services. The fifth column provides the estimated percent increase relative to all Medicaid spending in the State.

The table demonstrates that the impact varies considerably across States. In two States, expenditures are projected to decline. The largest increases would be in Mississippi (14.6 percent) and West Virginia (14.1 percent). The increases by State depend on both the percent increase in Medicaid fees and the importance of physician services in the overall spending by each State. The fourth column indicates the percent increase relative to current spending on affected services. For these services, expenditures would increase by 31.4 percent in West Virginia, 27.4 percent in Mississippi, and by 14.0-16.0 percent in large States such as Pennsylvania, Maryland, New Jersey, New York, and Illinois.

The rest of our discussion provides more detail on these results. First, Table 5 provides information on the increases in Medicaid fees that would be required in each State to increase them to the MFS. On average, States would be faced with a 48.6-percent increase in fees. Because Medicaid fees vary considerably across States, the impact of adopting the MFS also varies widely. The results indicate that five States (West Virginia, New York, New Jersey, Pennsylvania, and Missouri) would have more than a twofold increase in their average fee levels. Many other States would have fee increases of more than 50 percent. The two States (Texas and Alaska) with Medicaid fee levels above Medicare levels in 1990 would actually reduce fees.

Most of the increases in fees would come in primary care services and hospital visits. Primary care services would increase on average by 66.1 percent, and fees for hospital visits would double. On the other hand, fees for obstetrical care would actually come down, on average. Our survey results indicate that only 14 States had fees for obstetrical services lower than the levels in the new MFS. Surgical fees would also be relatively unaffected on average. In many States, there would be significant decreases in Medicaid fees to bring them in line with Medicare levels. Other States would experience some increase.

Table 6 examines the percent increase in U.S. Medicaid expenditures for each affected service (hospital inpatient care, outpatient services, prescription drugs, and physician services) for children, adults, the blind, and the disabled. Recall that estimates for the blind and the disabled used the elasticity estimates for the adult population. The results (under the

Table 5

**Percent Increases in Medicaid Fees Required to Equal the New Medicare Fee Schedule, by
Type of Service, Percent Increase: Fiscal Year 1990**

State	All Fees	Primary Care	Hospital Visits	Obstetrics	Surgery	Laboratory Tests	Imaging
	Percent						
All	48.6	66.1	105.0	-6.4	9.5	31.8	34.6
Alabama	39.0	63.5	84.2	-23.1	-11.1	23.1	31.1
Alaska	-13.3	-7.1	-18.7	-17.9	-56.0	7.5	-0.6
Arkansas	3.9	7.5	7.8	-1.1	-21.5	12.6	7.1
California	56.4	81.6	78.7	7.5	12.9	14.4	50.2
Colorado	34.9	47.5	79.0	-15.5	24.7	-7.0	38.9
Connecticut	62.0	92.1	93.7	-6.8	6.2	34.3	69.4
Delaware	60.8	107.9	56.5	3.2	1.0	25.0	16.5
District of Columbia	57.3	79.6	141.7	-38.1	33.0	126.4	41.1
Florida	18.6	43.3	18.2	-7.4	-4.2	3.9	-24.2
Georgia	1.8	28.5	4.1	-43.3	-47.4	-12.6	8.0
Hawaii	25.9	28.2	22.7	42.9	-29.6	30.8	15.5
Idaho	21.8	40.8	61.4	-36.1	-0.5	13.7	19.9
Illinois	79.5	84.7	172.3	-9.1	9.8	45.3	175.4
Indiana	2.3	11.8	14.2	-12.1	-46.2	-23.7	9.2
Iowa	29.2	48.5	65.5	-9.9	-26.8	24.9	8.7
Kansas	54.1	48.8	231.9	-2.5	2.1	10.1	-15.7
Kentucky	40.2	72.8	88.0	-27.2	-18.4	14.3	8.3
Louisiana	9.0	28.0	24.6	-42.1	-1.2	1.6	20.1
Maine	79.0	94.6	163.2	-5.5	72.3	14.6	89.9
Maryland	96.6	102.4	291.7	-41.0	84.0	20.2	117.5
Massachusetts	10.9	5.8	55.2	-30.2	-4.1	30.2	71.3
Michigan	74.9	76.2	165.2	26.7	32.8	97.5	65.7
Minnesota	22.5	38.2	34.3	0.8	-22.7	33.0	5.1
Mississippi	97.4	130.6	248.9	-19.9	50.9	39.6	18.2
Missouri	101.7	117.4	214.4	22.7	83.5	25.3	65.5
Montana	32.9	45.0	44.4	7.7	5.9	-3.2	40.5
Nebraska	15.6	27.4	53.9	-4.2	-5.4	-12.8	-35.5
Nevada	6.3	15.1	32.4	-29.2	-33.7	8.2	33.1
New Hampshire	60.6	47.2	208.5	-24.1	65.5	50.7	97.8
New Jersey	166.8	169.0	349.1	72.1	127.3	181.4	120.6
New Mexico	34.9	43.3	57.5	-2.1	-17.6	129.5	59.8
New York	229.0	242.6	591.6	-10.4	210.4	493.4	115.8
North Carolina	26.7	50.1	51.0	-19.6	-20.9	4.2	19.2
North Dakota	31.0	60.9	51.3	-11.0	-7.4	-2.9	-16.9
Ohio	71.1	88.4	161.7	13.7	13.4	12.3	32.7
Oklahoma	34.2	62.1	57.2	-5.4	-24.2	-1.3	1.0
Oregon	36.1	52.4	80.6	-13.5	0.8	16.7	31.3
Pennsylvania	102.8	149.4	130.0	43.2	16.7	98.2	28.2
South Carolina	22.3	37.8	87.9	-38.2	2.6	-6.7	6.8
South Dakota	24.0	42.6	24.0	17.9	-26.5	-1.3	-14.1
Tennessee	16.1	14.8	77.3	0.7	-24.6	-18.5	-0.5
Texas	-2.1	19.4	29.0	-40.9	-41.0	-37.4	-31.9
Utah	42.3	52.5	28.8	27.2	0.4	21.5	81.8
Vermont	54.6	81.3	92.4	-15.5	51.0	-1.7	43.8
Virginia	20.3	47.8	30.6	-24.2	-39.5	-14.7	21.5
Washington	48.8	51.5	125.4	2.6	28.7	16.7	46.6
West Virginia	183.4	267.2	285.9	16.0	68.2	15.9	118.5
Wisconsin	51.3	83.7	60.3	22.3	-18.6	14.8	-0.8
Wyoming	5.5	12.6	37.0	-13.5	-19.5	-10.8	-13.8

SOURCE: Urban Institute simulations.

Table 6

Increases in Medicaid Expenditures From Adopting Medicare Fee Schedule, by Service, Using Alternative Assumptions of Behavioral Response

Service	Increase in Medicaid Expenditures in Billions with 33 Percent Cap	Percent Increase in Medicaid Expenditures with 33 Percent Cap	Increase in Medicaid Expenditures in Billions with 50 Percent Cap	Percent Increase in Medicaid Expenditures with 50 Percent Cap	Increase in Medicaid Expenditures in Billions with No Cap	Percent Increase in Medicaid Expenditures with No Cap
All Services	\$2.5	9.2	\$2.6	9.5	\$2.9	10.4
Physician Services	2.6	58.9	2.7	61.2	3.0	68.5
Inpatient Care	-0.6	-3.9	-0.9	-5.5	-1.9	-11.7
Outpatient Services	0.3	6.2	0.4	8.7	0.9	19.8
Prescription Drugs	0.3	9.9	0.4	13.9	0.9	28.4

SOURCE: Urban Institute simulations.

50-percent behavioral response assumption) indicate spending on all affected services would increase by 9.5 percent. As shown earlier, the percent increase in all Medicaid expenditures would be somewhat lower, 4.0 percent. The effect on physician services would be substantially greater. On average, we estimate physician expenditures to increase by 61.2 percent. Physician expenditures would more than double in Maryland, Mississippi, Missouri, New Jersey, New York, Pennsylvania, and West Virginia. States that actually would reduce their fees are projected to have small reductions in their expenditures for physician services.

DISCUSSION

This study examines the effects on Federal and State Medicaid expenditures of increasing Medicaid physician fees to levels specified under the MFS. The analysis uses data from a new survey of State Medicaid physician fees and estimates from a behavioral response model to estimate the effects. Three potential limitations of the analysis should be noted. First, because the behavioral response model is based on data from three States, the model's results may not be generalizable to all States. However, the model

does control for State-specific factors. Second, the simulation applies the behavioral response model for adults to the disabled Medicaid population. Although this may bias the results, the direction of the bias is unclear. Third, the analysis applies the behavioral response model's cross-sectional results to longitudinal changes. Because the cross-sectional results describe long-term equilibrium effects, the simulation may overstate the short-term impacts of increasing fees.

The analysis indicates that adopting the MFS would increase Medicaid expenditures by \$2.5-\$2.9 billion. The costs of adopting the MFS depend on how the policy is implemented. For example, data from our survey of Medicaid physician fees suggest that Medicaid currently pays higher fees for obstetrical procedures than would be the case under the MFS in all but 14 States. Permitting States to continue to pay higher fee levels would increase costs by approximately another \$1 billion. On the other hand, the costs of increasing Medicaid fees would be lower if Medicaid programs were only required to increase fees to 90 percent of the MFS.

Many of the largest effects would be in wealthier and more populous States. Cali-

ifornia, Maryland, Michigan, New York, New Jersey, Pennsylvania, and Illinois would all experience increases in total Medicaid expenditures of 5 percent or more. These States would have to bear more than one-half of the increased costs because of their matching rate. But the effects would also be large in some smaller and poorer States. The largest effects, for example, would be in Mississippi (14.6 percent) and West Virginia (14.1 percent). Kentucky, Maine, Utah, Vermont, and Washington would also face increases of greater than 5 percent. The Federal Government would be financially responsible for much more than one-half of the increased costs in these States, however.

Although the costs of increasing Medicaid fees to Medicare levels are not trivial, there are potential benefits. The literature strongly indicates that increasing fees will increase physician participation (e.g., Held and Holahan, 1985; Mitchell, 1991; Sloan, Mitchell, and Cromwell, 1978). To the extent that greater participation by physicians improves Medicaid enrollees' access to care, encourages utilization of appropriate services, and/or improves quality of care, the potential benefits are significant. Given that the goal of a policy of increasing fees is to improve access, these results are encouraging.

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