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# Issue Brief

# **State Hospital Rate-Setting Revisited**

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Commonwealth Fund pub. 1332 Vol. 69 **ABSTRACT:** In an attempt to control rapid growth in hospital costs, beginning in the mid-1970s several states implemented rate-setting programs to regulate hospital payments. In seven states, rate-setting was in effect for a substantial period of time (14 years or more). While most of these programs were discontinued by the mid-1990s, two are still active. In five of the seven states, the rates of increase in hospital costs were lower than the corresponding national rates during the periods in which the regulation programs were in place. Four of the states—Maryland, Massachusetts, New York, and New Jersey—had some of the lowest rates of hospital cost increases among all the states. This indicates that hospital rate regulation may be a useful approach in managing a major component of health care spending.

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#### INTRODUCTION

From 1970 to 1975, spending on hospital services grew at an annual rate of 13.4 percent.<sup>1</sup> In an attempt to slow this growth, the states of Connecticut, Maryland, Massachusetts, New Jersey, New York, Washington, and West Virginia enacted legislation in the 1970s and early 1980s that established hospital rate-setting programs. Rate-setting programs are operated by commissions established by the state legislature or by an agency of the state government. They set limits on the rates or budgets of the hospitals. Some use a formula-based approach, some review rates or budgets of hospitals individually, and some use a mix of these two approaches. Evaluations of the impact of state rate-setting generally have found that it was effective in slowing the growth of hospital costs.<sup>2</sup> However, in the late 1980s and early 1990s, increasing emphasis on competition and managed care led to the dismantling of most of these state systems. Five of the seven states terminated their programs by 1996, while two states—Maryland and West Virginia—still have active rate-setting programs.<sup>3</sup> This issue brief examines the

changes in hospital costs and charges in states that had or still have rate-setting programs. It also considers what happened when five states terminated their ratesetting programs.

#### **HOW THIS STUDY WAS CONDUCTED**

Data on hospital costs and charges for the United States as a whole and in the regulated states for the period 1974 to 2007 were extracted from *AHA Hospital Statistics*, an annual publication of the American Hospital Association.<sup>4</sup>

For each of the five states that terminated their regulatory programs, the increase in the cost per equivalent inpatient admission (EIPA) was calculated from the implementation to the discontinuation of ratesetting, and then from that date to 2007. Although the precise year in which rate-setting started or ended may be subject to interpretation, the dates used in this analysis are a reasonable representation of when the state programs were most likely to have had an impact on hospital cost growth. For example, Maryland froze the rates of all hospitals in 1974 and published an allowed increase every six months, but took two years to review and set the rates of all the hospitals. So, while regulation started in 1974, full implementation of rate-setting did not occur until 1976.

Conforming to the standard definition used by the American Hospital Association and in most analyses of hospital payments and costs, EIPAs are used here as measure of hospital workload. EIPAs are a count of inpatient admissions adjusted upward to account for the volume of outpatient services. The formula used is: equivalent inpatient admissions = inpatient admissions × (total inpatient and outpatient revenue/inpatient revenue). This can thought of as converting an outpatient visit to a fraction of an inpatient admission, the fraction being the revenue for an outpatient visit divided by the revenue for an inpatient admission. The number of outpatient equivalent admissions is this fraction times the number of outpatient visits; the outpatient equivalent admissions are added to the inpatient admissions to arrive at a total number of EIPAs.

#### RESULTS

## State Rate-Setting Was Successful in Most States Where It Was Tried

Maryland, Massachusetts, New Jersey, New York, and Washington had their regulatory systems in place by 1975, and Connecticut implemented its rate-setting mechanism in 1976. Thus, it is reasonable to use 1974 as the base year for comparisons. The average annual increase in costs per EIPA was calculated for each of these states from 1974 until the year each dropped rate regulation. These increases are presented in Exhibit 1, along with the comparable increase for the U.S. as a whole. Exhibit 1 also includes state and U.S. increases from the year that regulation stopped until 2007, so that the relative increases after regulation ended can be compared with the increases under regulation.

The data indicate that rate-setting regulations were successful in controlling state hospital costs in Maryland, Massachusetts, New Jersey, and New York relative to the U.S. rate of increase. In Connecticut and Washington, costs increased faster than in the U.S. during the periods in which those two states were regulated. In West Virginia, costs stayed about the same as the national rate.

Since rate regulation ended in New Jersey and Washington, hospital costs in those states have gone up faster than they have nationwide. In Connecticut, the state-specific rate has been lower than the national rate since regulation ended. In Massachusetts and New York, the state-specific rate since regulation ended has been about the same as the national rate.

Exhibit 2 presents the cost data for 1974 through 1992, comparing the increases in hospital costs over the period when regulation was at its peak. The year 1974 was selected as the starting point for this comparison because Maryland and New Jersey began regulation that year, New York already had regulation in place, and Connecticut, Massachusetts, and Washington implemented regulation within two years. The year 1992 was selected as the endpoint because it was the point at which half the rate-setting states had discontinued their regulation. Among all states, with and without regulation, Maryland had the lowest rate

State	Years Regulated	Increase Under Rate-Setting	U.S. Comparison	Increase After Rate-Setting	U.S. Comparison
Connecticut	1976–1994	11.9%	11.7%	2.3%	3.5%
Maryland	1974–present	6.9%	7.7%	n/a	n/a
Massachusetts	1975–1991	10.2%	12.0%	4.2%	4.1%
New Jersey	1974–1992	10.7%	11.2%	4.0%	3.6%
New York	1971–1996	8.5%*	9.5%	4.0%	4.1%
Washington	1975–1989	13.7%	12.5%	5.4%	4.5%
West Virginia	1985–present	5.0%	5.3%	n/a	n/a

# Exhibit 1. Average Annual Increases in Hospital Costs per EIPA 1974 Until End of Rate-Setting Program and From End of Program Until 2007

\* Rate of increase from 1974 through 1996.

Note: EIPA is equivalent inpatient admissions. The formula used is:

equivalent inpatient admissions = inpatient admissions x (total inpatient and outpatient revenue/inpatient revenue).

Source: American Hospital Association, AHA Hospital Statistics.

of increase in costs per EIPA from 1974 to1992, while Massachusetts had the third-lowest rate of increase in this time period. New York had the fourth-lowest rate and New Jersey the ninth-lowest rate.

These results strongly suggest that state ratesetting was successful at controlling the rate of increase in hospital costs in most of the states that implemented this type of regulation. However, it does not appear to have been successful in Connecticut and Washington, since the increases in costs per EIPA in these states exceeded the corresponding national increases.

Exhibit 3 shows the average annual increase in cost per EIPA from 1974 to 2007 for all states and the U.S. The budget review system in Rhode Island (described below) appears to have been remarkably successful in controlling hospital cost increases, with the rate of cost increase matching that in the most successfully regulated states. Maryland, Massachusetts, and New York have the second-, third-, and fourthlowest rates of hospital cost increases, respectively, of any states over this time period.

# Hospital Charges Increase Faster Than Costs

Over the past 30 years, but particularly in the last decade, hospitals across the U.S. have been increasing

their charges faster than the rate of increase in the costs of providing care. This is partly because most payers negotiate discounts for services and therefore pay scant attention to hospital charges. Further, some aspects of the payment system reward high charges relative to costs. For example, some hospitals have rapidly increased their charges in order to increase their Medicare outpatient payments, and to exploit a loophole in the Medicare payment for outliers.<sup>5</sup> But rapidly rising charges increase the liability of patients who still pay "retail" rates for care-many of whom are uninsured and therefore least able to pay. In 1974, hospital charges were 5 percent higher than costs nationwide and 9 percent higher than costs in Maryland (where rate-setting had just been implemented). By 2007, this had changed dramatically, with charges 182 percent above costs in the U.S. but only 21 percent above costs in Maryland, which still had rate-setting regulations in place.

# Hospital Cost Trends in Rate-Setting States

Exhibits 4 through 10 show trends in hospital costs among states that had or still have rate-setting programs. Specifically, they show the ratio of the cost per EIPA in each state to the U.S. cost per EIPA, from 1974

Rank	State	Increase
	U.S.	11.03
1	Maryland	9.00
2	Rhode Island	9.09
3	Massachusetts	9.28
4	New York	9.71
5	Arizona	10.28
6	Michigan	10.33
7	Wisconsin	10.46
8	Illinois	10.58
9	New Jersev	10.60
10	Vermont	10.65
11	Minnesota	10.82
12	Nevada	10.83
13	California	10.84
14	Delaware	10.87
15	Ohio	10.91
16	Pennsylvania	11 04
17	Connecticut	11 23
18	Oregon	11.20
19	Mississinni	11.30
20	Virginia	11 42
21	District of Columbia	11 44
27	Missouri	11 47
22	West Virginia	11.48
20		11.40
24	Maine	11 57
20	Florida	11.64
20	lowa	11 72
21	Oklahoma	11.72
20	Washington	11.75
29	Kansas	11.79
30		11.02
30	Alabama	11.05
32	Nobroaka	11.00
24	Kentucku	11.92
34	Coordin	11.90
35	Netth Carolina	12.00
30	Arkanaa	12.07
37	Alkalisas	12.20
30		12.29
39	Iennessee	12.31
40		12.32
41	Louisiana	12.33
42		12.37
43		12.41
44		12.43
45		12.44
46	Hawall	12.57
47	Iexas	12.64
48	Montana	12.72
49	vvyoming	12.85
50	S. Carolina	12.96
51	Alaska	13.48

Exhibit 2. Average Annual Increase in Cost per EIPA, 1974–1992

Note: EIPA is equivalent inpatient admissions. The formula used is:

equivalent inpatient admissions = inpatient admissions x (total inpatient and outpatient revenue/inpatient revenue). Source: American Hospital Association, *AHA Hospital Statistics*.

Rank	State	Increase
	United States	7.69%
1	Rhode Island	6.94
2	Maryland	6.95
3	Massachusetts	6.96
4	New York	7.00
5	Michigan	7.08
6	Illinois	7.15
7	Connecticut	7.23
8	Arizona	7.24
9	Florida	7.34
10	Alabama	7.41
11	Pennsylvania	7.47
12	Ohio	7.53
13	Nevada	7.58
14	New Jersev	7 58
15	Kansas	7 73
16	West Virginia	7.73
10	Delaware	7.76
18	California	7.70
10	Oklahoma	7.77
20	Vormont	7.15
20		7.02
21	Migoouri	7.02
22	Wissouri	7.00
23		7.93
24	Iennessee	7.93
25	Minnesola	7.95
20	Virginia	7.97
27	Kentucky	7.98
28	Iowa	8.01
29	North Carolina	8.16
30	Georgia	8.18
31	Indiana	8.25
32	North Dakota	8.26
33	Hawaii	8.26
34	District of Columbia	8.28
35	Arkansas	8.30
36	Maine	8.38
37	Oregon	8.42
38	Nebraska	8.44
39	New Mexico	8.45
40	Mississippi	8.46
41	Texas	8.46
42	Idaho	8.53
43	South Carolina	8.57
44	Colorado	8.62
45	Utah	8.69
46	Washington	8.69
47	Montana	8.91
48	South Dakota	9.04
49	Wyoming	9.08
50	New Hampshire	9.12
51	Alaska	9.20

Exhibit 3. Average Annual Increase in Cost per EIPA, 1974–2007

Note: EIPA is equivalent inpatient admissions. The formula used is:

equivalent inpatient admissions = inpatient admissions x (total inpatient and outpatient revenue/inpatient revenue). Source: American Hospital Association, AHA Hospital Statistics.

through 2007. (In the case of Maryland, there is no termination date; in the case of West Virginia, the vertical line indicates when rate-setting was initiated.)

Connecticut (Exhibit 4). The legislation setting up Connecticut's rate-setting system was enacted in 1973, and regulation began in 1976. The program was operated by an independent commission and involved a review of hospital rates with guidelines specified in regulation, hearings, and negotiation.<sup>6</sup> It was terminated in 1994. Over the period it regulated hospital rates, the cost per EIPA in Connecticut increased faster than the national average-550 percent in Connecticut versus 529 percent in the U.S. as a whole. Since 1994, the cost per EIPA in Connecticut has increased less than the national increase—34 percent versus 57 percent for the U.S. The program in Connecticut suffered from the disadvantage that its administrators were never provided sufficient authority to enforce compliance with the approved rates.

Hospital rate-setting in Connecticut has had a checkered history. The method used to set the rates of the hospitals changed three times, and the system has been the subject of much controversy.

The first rate-setting system, set up in 1976, involved an annual review of hospital cost and revenue budgets. Prior to the start of their fiscal year, hospitals submitted their budgets to the Commission on Hospitals and Health Care for review and approval. This system resulted in considerable antagonism between the Commission and the hospitals, resulting in numerous court challenges to Commission decisions. The system was then simplified by imposing a criterion that if the hospital's cost per EIPA increased by less than a trend factor plus two percentage points, then the hospital was exempted from any further review. Certain hospitals took advantage of a loophole in this constraint (the limit was on cost increases, not on revenue increases) and the ensuing uproar from payers resulted in the implementation of a diagnosisrelated group (DRG) pricing system. This system failed to control rate increases, and experienced the problems that plague DRG pricing systems, for example,



individual patients receiving bills that were disproportionate to the services provided. It was replaced by a system that established constraints on the increase in total net and gross revenue of each hospital each year, with a detailed review of the hospital budget for hospitals that failed these screens. Under this system, hospitals billed patients on the basis of the itemized charges for the services provided.

The DRG pricing system in Connecticut set a rate for each DRG, and the hospitals had to charge on the basis of the approved DRG rates. These rates were paid by all non-Medicare payers, but there was an appeal mechanism for self-pay patients who thought they had been overcharged. The base year for the rates was the fiscal year ending in 1986, and the approved revenues were based on the revenues that were approved by the Commission in that year, so that the rates were hospital-specific. This rate was adjusted forward for inflation and a medical technology factor, with capital costs and malpractice costs included at the level at which they were actually incurred. An important feature of this system was that the Medicare and Medicaid shortfalls were capped. The amount built into the private-sector rates for the Medicare and Medicaid payment shortfalls was frozen at the level of the shortfall in 1986. Outlier payments were made for cases in which patients had a long length of stay.

Because the DRGs were, and to some extent still are, poor predictors of resource use for psychiatric and rehabilitation cases, per-diem rates were established for psychiatric and rehabilitation units and hospitals.

*Maryland* (Exhibit 5). Maryland's rate-setting legislation was enacted in 1971 and a reporting and ratesetting system was developed over the next three years; rate-setting actually began in 1974. The program is operated by an independent commission (the Maryland Health Services Cost Review Commission, or HSCRC) and involves a review of hospital rates with guidelines specified in regulation, hearings, and negotiation. However, most hospital rates are updated by a formuladriven update factor each year, and very few individual hospital reviews are required.<sup>7</sup>



This program is still in operation and covers all payers, including Medicare and Medicaid. From 1974 to 2007, the cost per EIPA increase in Maryland—878 percent, versus a national increase of 1,088 percent—was the second-lowest in the nation (after Rhode Island).

Through 1992, Maryland was extremely successful in keeping the cost per EIPA increases below the corresponding national increases. However, a change in state policy around 1992 that favored profitability over rate-setting reversed this trend. For five years, Maryland experienced increases in costs that were substantially higher than the rate of national increases. Another policy change occurred around 1996, when the HSCRC concluded that loosening of the financial constraints had allowed costs to increase too much and modified the formula used to calculate allowable rate increases. After this policy change, Maryland returned to the previous pattern, constraining hospital costs more effectively than the nationwide trend.

What differentiates Maryland's program from the other rate-setting systems, and why has it survived when the others failed? McDonough's analysis of the underlying reasons for the demise of other state ratesetting systems points to two important reasons for the endurance of Maryland's system: 1) the enabling legislation was actually drafted by the Maryland Hospital Association, an organization that was run at the time by hospital trustees, and the hospital industry has continued to support it; and 2) the rate-setting system severely restricts the discounts that payers, including health maintenance organizations (HMOs), can receive.<sup>8</sup> Allowing unrestricted discounting to HMOs greatly contributed to the dissatisfaction on the part of hospitals with rate-setting in the other states.<sup>9</sup> The fact that Medicare and Medicaid pay the rates set by the HSCRC is also a major contributing factor to the survival of the system.

Maryland's has been the most stable of all the state rate-setting systems. Its design has evolved gradually, while some other states have made abrupt changes to their programs. Further, there has been effective cooperation between the state's hospital industry and rate-setting body.

The rate-setting system, based partially on formulas and partially on detailed reviews, controls hospitals' revenue or charges. The majority of hospitals receive an automatic formula adjustment to account for inflation, volume changes, change in the payer mix, and certain other factors. Hospitals found to have high charges receive either rate adjustments that are less than the rate of inflation or no adjustment; hospitals found to have low charges and require additional revenue can apply for a rate increase, which is subject to a detailed review.

Maryland has a mixed system in regard to the unit of output subject to rate control. It recognizes the differences among hospitals, both in terms of their ability to deal with a complicated rate-setting system and the nature of the market in which they operate. Some rural hospitals with relatively self-contained markets are regulated by means of a total revenue system, but the constraint on most hospitals is an approved charge per case, adjusted for the case mix of the hospital. The system is partly customized to the needs of a particular hospital.

*Total revenue system.* A few rural Maryland hospitals with relatively self-contained service areas are given a total revenue budget based on the approved revenue of that hospital for some base year. This amount is increased each year for inflation, plus a factor for new technology (initially 1 percent, then increased to 2 percent, and now determined each year) and 1 percent for population growth and aging (unless the hospital can justify a greater factor for population growth and aging). Certain appeal adjustments also are made, for example to take into account malpractice insurance costs. There are no adjustments for change in the volume of patients treated.

This system provides predictable revenue to the hospital. The hospitals charge patients on the basis of the actual services provided within the total approved revenue. For example, a patient who stays for two days will be charged less than a patient who stays for five days and has more services. If the hospital generates more than the approved revenue in one year, then the excess is deducted from its approved revenue for the subsequent year. Conversely, if the hospital generates less than its approved revenue in one year, then the shortfall is added to its approved revenue in the subsequent year.

*Guaranteed inpatient revenue/charge per case.* The system that applies to the majority of Maryland hospitals sets a guaranteed amount of revenue per case for inpatient services. The hospitals continue to charge patients on the basis of the itemized charges for the services provided, but charges are constrained to be within the approved revenue per case after adjustment for the volume and case mix. The rates are normally increased each year using a formula that adjusts for inflation plus an allowance for new technology and other factors (initially 1 percent, then increased to 2 percent, and now determined by the Commission each year). Volume adjustments are made, with hospitals getting 85 percent of the average cost per case for each case above the budgeted level, and losing 85 percent of the average cost per case for each case below the budgeted level. The approved charge per case, which is both a floor and a ceiling on the revenue per case, is automatically adjusted for changes in the case mix experienced by the hospital, as well as for changes in the mix of payers experienced by the hospital.

All Maryland hospitals bill patients on the basis of the itemized charges for the services provided for that case, no matter which mechanism is used to control the total revenues.

The Maryland Hospital Association has prepared a book describing in more detail the workings of the state's rate-setting system, and also has commissioned a book on the state's history of rate-setting.<sup>10</sup> Both help to explain the success of Maryland's rate-setting program and the cooperative relationship between the rate-setting Commission and the hospital industry. The Executive Director of the HSCRC describes the system and its impact in some detail in a recently published paper.<sup>11</sup>

*Massachusetts* (Exhibit 6). The Massachusetts ratesetting program commenced in 1975 and terminated in 1991. The program was operated by an independent commission and involved a review of rates with guidelines specified in regulation, hearings, and negotiation.<sup>12</sup> Over that time period, the increase in cost per EIPA in Massachusetts was 310 percent, compared with a national increase of 422 percent. From 1974 to 1992, Massachusetts had the thirdlowest rate of increase in cost per EIPA of any state, after Rhode Island and Maryland. Since regulation in



Massachusetts stopped, the increase has been slightly above the national rate: 94 percent in Massachusetts versus 90 percent for the U.S. as a whole.

The initial regulatory system set per-diem rates for Medicaid inpatient services and established controls on the total amounts that hospitals were permitted to charge for their services. The system involved a review using criteria established in regulation, with hearings when necessary and with flexibility for negotiation.

*New Jersey* (Exhibit 7). New Jersey started rate regulation in 1974 and discontinued it in 1992. The program was operated by the Department of Health, and



involved a review of rates with guidelines specified in regulation and negotiation.<sup>13</sup>

From 1974 to 1992, costs per EIPA in New Jersey rose 520 percent, substantially less than the 579 percent increase in the U.S. as a whole. This was the ninth-lowest rate of increase of any state over that time period. Since regulation stopped, costs per EIPA in New Jersey have increased faster than the nationwide rate, 80 percent versus a national rate of 70 percent.

New Jersey was the first state to use DRGs to set hospital prices. The state set a rate for each DRG in each hospital. The rate was a blend of a hospitalspecific cost and a statewide average cost for the case, with the percentage of the statewide average component dependent on how homogeneous the costs were within the given DRG. The more consistent the costs within the DRG, the more a standard cost component would be built into the rate.

Until 1989 all payers, including Medicare and Medicaid, were charged using these DRG prices, with some payers receiving discounts. An appeal mechanism was set up for self-pay patients who thought they had been overcharged, but this was abandoned in favor of a system in which patients with a short length of stay were charged a high per-diem rate, patients with a long length of stay were charged a lower per diem, and patients between the two thresholds were charged the DRG price. The rates were adjusted each year for inflation, changes in payer mix, changes in volume, and other appeals. This system was more formulistic than the Maryland system, but less so than the Medicare system.

*New York* (Exhibit 8). New York started its regulatory program in 1971 and ended it in 1996. The program was operated by the Department of Health and was quite formulaic.<sup>14</sup> Over that time period, costs per EIPA rose 506 percent in New York, compared with a national increase of 640 percent. New York had the fourth-lowest rate of increase of any state over the time period 1974 to 1992 (after Rhode Island, Maryland, and Massachusetts). Since regulation ended, the increase in costs per EIPA in New York has been



similar to the national rate of increase: 54 percent in New York versus 56 percent in the U.S. as a whole.

New York's rate-setting system was changed substantially several times. During the late 1970s and early 1980s it was a per-diem system, with the approved per-diem rate based on the actually incurred costs of the individual hospital from three years prior to the year for which the rates were being set, with various penalties and adjustments for factors such as low occupancy and high average length of stay. Blue Cross and Medicaid paid the same per-diem rate, Medicare paid according to their own system, and most other payers were charged on the basis of the itemized charges for the actual services provided, with a control on the relationship between the average charge per day and the Blue Cross per-diem rate. In 1983 the way in which the per-diem rate for Blue Cross and Medicaid was calculated was changed. The base from which the per diem was developed was kept constant at the approved 1981 base costs, and inflation and other adjustments were applied each year to increase the per-diem rates.

New York State started a DRG-based system effective January 1, 1988. This system was a blend of DRG pricing and DRG revenue limits. For each hospital, a rate was set for each DRG. The rate for 1988 was 90 percent hospital-specific and 10 percent based on a group standard. In subsequent years, the percentage of the standard rate was increased. In 1989, it was 75 percent hospital-specific and 25 percent standard; in 1990, it was 55 percent standard and 45 percent hospital-specific. The base year for the rates was 1981, with various adjustments for the intervening period. The rates were increased by an inflation factor each year, and capital, malpractice, and some other costs were paid at actually incurred levels. New York State had pools to pay for charity care and bad debts, and also a pool for distressed hospitals. There was an adjustment to the rate for large-volume changes (i.e., changes in excess of 10 percent).

Under the DRG-based system, the major payers for hospital services all paid a DRG price. Medicare and Medicaid paid the same rate, while private insurance companies paid 113 percent of the Blue Cross rate. (New York, and other states such as Maryland, provided Blue Cross a discount because of their open enrollment policies.) Self-pay patients were billed the detailed charges for the services they received, with a cap on their billing at 120 percent of the rate that an insurance company would pay for the DRG. Thus if Blue Cross paid \$2,000 for a case, an insurance company would pay \$2,260 for the same case, and a selfpay patient would pay the actual charges, but not more than \$2,712.

When it started its DRG-based system, New York State decided that the Medicare DRGs were inadequate for their purposes and greatly expanded the number of DRGs for newborn babies and AIDS patients. They also developed DRG weights specifically for the state's non-Medicare population.

*Washington* (Exhibit 9). Rate-setting regulation commenced in Washington State in 1975 and was terminated in 1989. The program was operated by an independent commission, and involved a review of hospital budgets with guidelines specified in regulation, hearings, and negotiation.<sup>15</sup> Over that time period, costs per EIPA rose by 404 percent, more than the 345 percent national rate of increase over the same period. Since the regulation was terminated, costs per EIPA in Washington have continued to increase faster than the nation: 159 percent in Washington compared with 121 percent in the U.S. as a whole.



Washington's approach provides an interesting contrast to the rate-setting programs in the northeastern states. The legislation establishing the Washington Hospital Commission was almost identical to that in Maryland, but its outcome was dramatically different. The Washington Hospital Commission took a different approach to rate-setting than did the Maryland Health Services Cost Review Commission. Where Maryland relied on incentives in the payment system to control hospital expenditures, Washington relied on a detailed annual review of the costs and charges of each hospital to do so.

Even though the allowances provided by the Washington Hospital Commission were generous, and the rate of inflation in hospital costs in Washington State exceeded the national average over the period of the regulation, the hospital industry was antagonistic toward the regulatory system and in 1989 managed to bring it to an end. Such antagonism is an almost inevitable outcome of a system involving annual budget reviews. Such detailed reviews substitute the judgment of regulators for the judgment of hospital administrators, and may thus arouse the ire of administrators who feel their authority is being undermined.

*West Virginia* (Exhibit 10). While West Virginia was relatively late in enacting rate-setting, passing the enabling legislation in 1983 and starting regulation in

1985, its program is still operating. It is operated by an independent commission, the West Virginia Health Care Authority, which sets revenue limits for nongovernmental payers. The hospitals request rate increases each year and these are reviewed using guidelines specified in regulation, hearings, and negotiation.<sup>16</sup> From 1985 to 2007, costs per EIPA in West Virginia increased by 192 percent, compared with a nationwide increase of 213 percent.



#### **DISCUSSION AND CONCLUSIONS**

The data analyzed here indicate that rate-setting can be successful in controlling the rate of increase in hospital costs. However, its success depends on the way in which it is carried out, as well as regulators' ability to enforce the rates set and to exact penalties for noncompliance. The rate-setting system in Maryland has had a dramatic impact on the rate of increase in hospital costs per EIPA, and the rate-setting systems in Massachusetts, New Jersey, and New York were similarly successful while they were in operation. Since the demise of rate-setting in Massachusetts, New Jersey, and New York, the states' hospital costs have increased at rates close to or above the national average.

It is often assumed that regulation is less effective than competition in controlling costs. The results discussed here suggest that regulation can more effectively control hospital costs than does the limited competition that currently exists in the marketplace for hospital services.

The states included in this study are those generally considered to have had (or currently have) mandatory rate-setting systems and, with the exception of West Virginia (which started its system much later than the other states) were included in the 1980 evaluation of rate-setting by Biles et al.<sup>17</sup> Other states have enacted different forms of regulation. For example, Arizona, Oregon, Rhode Island, and Vermont had budget review systems with mandatory participation. Arizona, Rhode Island, and Vermont, but particularly Rhode Island, fared better in controlling the rate of hospital costs than most other states, suggesting that their regulatory programs also had an impact (Exhibit 2).

The Medicare program provides an example of a regulatory effort to set hospital payment rates on a nationwide scale. Its inpatient prospective payment system (IPPS), which was implemented in 1983 and pays hospitals a fixed price (adjusted for patient and market characteristics that may affect costs but are beyond the hospital's control), generally has been effective in controlling Medicare hospital spending. After implementation of the system, there were substantial reductions in the length of inpatient hospital stays, with no decline in quality, and hospital costs have steadily decreased as a proportion of total Medicare spending.<sup>18</sup> However, the impact of the IPPS has decreased over time, as hospitals have moved services from the inpatient setting to other settings. This, in turn, has led Medicare to expand their rate-setting approaches to apply to many other settings.

In addition, private insurers have complained about "cost-shifting," or having to pay higher rates for hospital services as Medicare and Medicaid payment rates fail to keep up with hospital costs. Indeed, from 1997 to 2007, Medicare payments relative to hospital costs declined from 104 percent to 91 percent, while private payers have seen their payments climb from 116 percent to 132 percent of hospital costs.<sup>19</sup> While there are many interpretations about the possible implications of these trends, they indicate the difficulty of attempting to set rates for individual payers, rather than taking a more comprehensive approach.

Rate-setting has generally applied to inpatient services only. Although the use of EIPAs as a measure of hospital production is common, it makes an implicit assumption that inpatient and outpatient costs are proportional to inpatient and outpatient charges. This has become less true over time, as hospitals have differentially increased charges to inpatient and outpatient services in response to various incentives in the payment systems. Ideally, rate-setting approaches would be comprehensive, including both inpatient and outpatient activities as a "package." An advantage of such an approach, or even of regulation of EIPAs rather than inpatient rates alone, is that it would encourage substitution of different types of care for traditional inpatient care and potentially encourage greater efficiency in the use of health care resources.

Finally, it is worth considering the fact that hospital care represents 31 percent of overall national health care spending.<sup>20</sup> Thus, even a modest decrease in hospital expenditures—say, on the order of 5 percent, a level that was met or exceeded in most states adopting hospital rate regulation—would achieve an annual savings of \$35 billion, based on 2007 expenditures. With a sharply rising federal deficit, and the potential for substantial additional federal costs related to health reform, every cost-saving alternative should be considered. Rate-setting approaches have proven successful on the state level, and could help control the growth in health care spending.

#### Notes

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