Statement of
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before the
Subcommittee on Health
Committee on Finance
United States Senate

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NOTICE

This statement is not available for public release until it is delivered at 2:30 p.m. (EDT) on Tuesday, April 7, 1987.

From the inception of Medicare's Prospective Payment System (PPS), there has been concern about its effects on the financial condition of hospitals. Early studies suggested that the PPS might be making substantial contributions to the profits of hospitals. Because new data on hospitals' costs are now available, the Congressional Budget Office (CBO) and others were recently asked to analyze this issue. Their studies have found that operating margins on PPS revenues were about 12 percent in 1984, which corresponds to profits of about 14 percent. Although no particular average operating or profit margin was specified as a target when the original PPS rates were set, such high ones are in stark contrast to the margins and profits of zero that prevailed under the previous cost reimbursement system.

While these large profits represent a signal for concern, they do not necessarily imply a problem with the PPS. For example, they might simply reflect falling costs as a result of hospitals' response to the system's strong incentives for greater efficiency. On the other hand, they might also reflect payment rates that, for a variety of reasons, had been set higher than intended. At your request, the CBO is examining these possibilities.

Following a brief description of the PPS, my testimony will address three topics:

- A review of CBO's estimates of operating margins on PPS payments in federal fiscal year 1984, and projections of these margins for 1985 through 1987;

- An illustration of one method for adjusting the PPS rates to reflect newer data; and
- The implications of the new data for updating the PPS rates to fiscal year 1988 and beyond.

BACKGROUND

In passing the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), the Congress laid the groundwork for the PPS, which was enacted as part of the Social Security Amendments of 1983. Both actions were prompted by an unacceptably high growth rate in Medicare's outlays for hospital costs, which averaged 18 percent a year between 1975 and 1982, or 8 percent a year above general price inflation. Moreover, concern was widespread that the previous cost-based reimbursement system did not encourage the efficient provision of care, and that it was not improving the health of beneficiaries in relation to federal spending. In particular, cost reimbursement encouraged hospitals to provide all services that had any benefit at all--not just those that were worth more than they cost.

The main objectives of the PPS are to lower the growth rate of Medicare's payments to hospitals and encourage efficiency in the provision of hospital care, while not adversely affecting its quality. It attempts to do so by specifying payment rates in advance and requiring hospitals to bear the loss if their costs are higher. In exchange, hospitals are allowed to keep the difference if their costs are lower than the payments. Thus, hospitals face strong financial incentives to provide care as efficiently as possible. Peer review organizations monitor the quality of care.

In principle, the fully implemented PPS promises to pay hospitals an amount for each patient, or case, equal to the cost of treatment in an efficiently run hospital. 1/ Because costs vary among equally efficient hospitals for several legitimate reasons, the system also includes numerous adjustments according to various characteristics of hospitals. As a result, Medicare's payments for the same type of case differ considerably among hospitals.

Specifically, the PPS sets fixed payment rates in advance for each of 471 categories known as diagnosis-related groups (DRGs) that were designed to reflect the value of resources used to treat different types of conditions. During the four-year transition from 1984 to 1987, the prospective amounts have been based on a combination of hospital-specific, regional, and national PPS rates, with the hospital-specific portion reflecting each hospital's own pre-PPS costs. Starting with hospitals' fiscal years that begin in federal fiscal year 1988, however, payments will be based on national rates only. These rates will continue to be calculated separately for urban and rural areas and adjusted for differences in wage levels among geographic areas. They will also be adjusted for the size of an institution's in-hospital training program for physicians, and if a disproportionately large share of the hospital's patients have low incomes.

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1. Some costs and some institutions are exempt from the PPS. Capital-related costs, such as depreciation and interest payments, and the direct costs of graduate medical education programs continue to be reimbursed separately. Moreover, children's hospitals, rehabilitation centers, and psychiatric hospitals are exempt from the PPS.

The national rates are based on the average cost per case in 1981, inflated to represent later years. As a result, when they were initially set, a number of assumptions had to be made about changes that would take place between 1981 and 1984. 2/ For example, how much hospitals' input prices would rise in 1983 and 1984 was not known. In addition, the new system was required to pay hospitals the same amount, in aggregate, as they would have received under TEFRA for 1984 and 1985. Because total PPS outlays are determined primarily by two factors—payment rates, which are subject to federal control, and hospitals' case mixes, which are not—this budget-neutrality requirement necessitated making an assumption about the increases in the case mix of hospitals that would occur as a result of improved coding practices. 3/ Even if all these assumptions had been correct, however, it was recognized that the PPS rates would still reflect the inefficiencies that had developed under the previous retrospective cost reimbursement system.

A process for updating the payment rates in subsequent years was also established. For 1985, Medicare's PPS rates were increased by the amount

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2. The same 1981 data, which had not been audited, were used to set the regional rates. Audited data on hospital costs in 1982-1983 were used to set the hospital-specific amounts.

3. Improved coding generally has meant that the same patients were coded into DRGs with higher payment rates, causing total payments to rise. These increases were accounted for in the budget neutrality calculations, because it was assumed that they would not have occurred under TEFRA, which did not base payments to hospitals on case mix classifications. While the number of cases also affects total outlays, the PPS has apparently had little effect on this factor.

thought necessary to meet the budget-neutrality requirement. For fiscal year 1986 and beyond, however, the Secretary of Health and Human Services (HHS) was given discretion over the percentage change in the payment rates—often referred to as the "update factor." In addition, an independent Commission--the Prospective Payment Assessment Commission (ProPAC)--was established to make recommendations about the PPS, including each year's update factor. The Secretary must consider these recommendations in making final decisions.

To determine their update factors for 1986 and beyond, both the Administration and ProPAC established methodologies that have two basic components. One is a measure of change in the prices of goods and services purchased by hospitals--often called the hospital's market basket. The second is a composite factor (called the policy target adjustment factor by the Administration and the discretionary adjustment factor by ProPAC). This composite factor is based on changes in technology and efficiency, as well as on forecasting errors embodied in the payment rates for previous years. While the inflation or market-basket portion of the update factor is generally expected to be positive, the composite factor can be either positive or negative. In addition, the Administration and ProPAC recommended different ways to adjust the 1986 and 1987 payment rates to reflect improved coding of patients into DRGs by physicians and hospitals. In the end, the Congress enacted a 0.5 percent increase for 1986 and a 1.15 percent increase for 1987.

Because hospitals' PPS payments and costs for treating Medicare beneficiaries are now available for 1984, the first year of the system, operating margins can be calculated directly. Cost data for 1985 through 1987 are not yet available, however, so projections must be made to calculate margins for these years.

Margins in 1984

Hospitals' 1984 operating margins, defined as:

$$\frac{\text{revenues - costs}}{\text{revenues}},$$

were determined by several factors. 4/ Because aggregate PPS payments were intended to match the outlays that would have occurred under TEFRA, payments were expected to be lower than the operating costs that hospitals as a group were experiencing when the system first went into effect. It was expected that some hospitals would have been penalized by the reimbursement limits set by TEFRA, and hence not have been paid for all the costs they incurred in treating Medicare patients. On the other hand, policymakers hoped that hospitals would respond to the new incentives, at least by enough to lower aggregate costs to the TEFRA limits, and possibly by more. In the former case, the average 1984 operating margin would have been zero; in the latter case, it would have been positive.

4. A hospital's margin is not the same as its profit rate, which is the difference between revenues and costs divided by costs. For example, a margin of 10 percent is equivalent to a profit of 11.1 percent, while a margin of 15 percent is equivalent to a profit of 17.6 percent.

As noted earlier, CBO estimates that the average operating margin on Medicare's PPS payments during federal fiscal year 1984 was actually 12.0 percent. 5/ In other words, on average, the cost of treating each Medicare case was 88 percent of the PPS payment. Therefore, hospitals received, in aggregate, $2.2 billion more in PPS payments than the costs they incurred. About half of the margins resulted from more efficient provision of hospital services and about half from payment rates that had been set too high because they were based on unaudited data and assumptions that proved to be incorrect.

The average margins for certain groups of hospitals differed considerably, however, from the overall average of 12 percent, as shown in Figure 1. Urban hospitals--which represent about 50 percent of hospitals, but account for over 80 percent of PPS payments--had an average operating margin of 13.1 percent. In sharp contrast, the average margin for rural hospitals was 6.6 percent, or about one-half that of urban hospitals. In addition, the operating margins of teaching hospitals were noticeably higher than those of nonteaching hospitals--15.4 percent for major teaching hospitals and 13.8 percent for minor teaching hospitals, compared with 10.2 percent for nonteaching ones. These differences resulted from cost reductions occurring at different rates in the various groups and from differing impacts of the forecasting errors made when initial payment rates were set.

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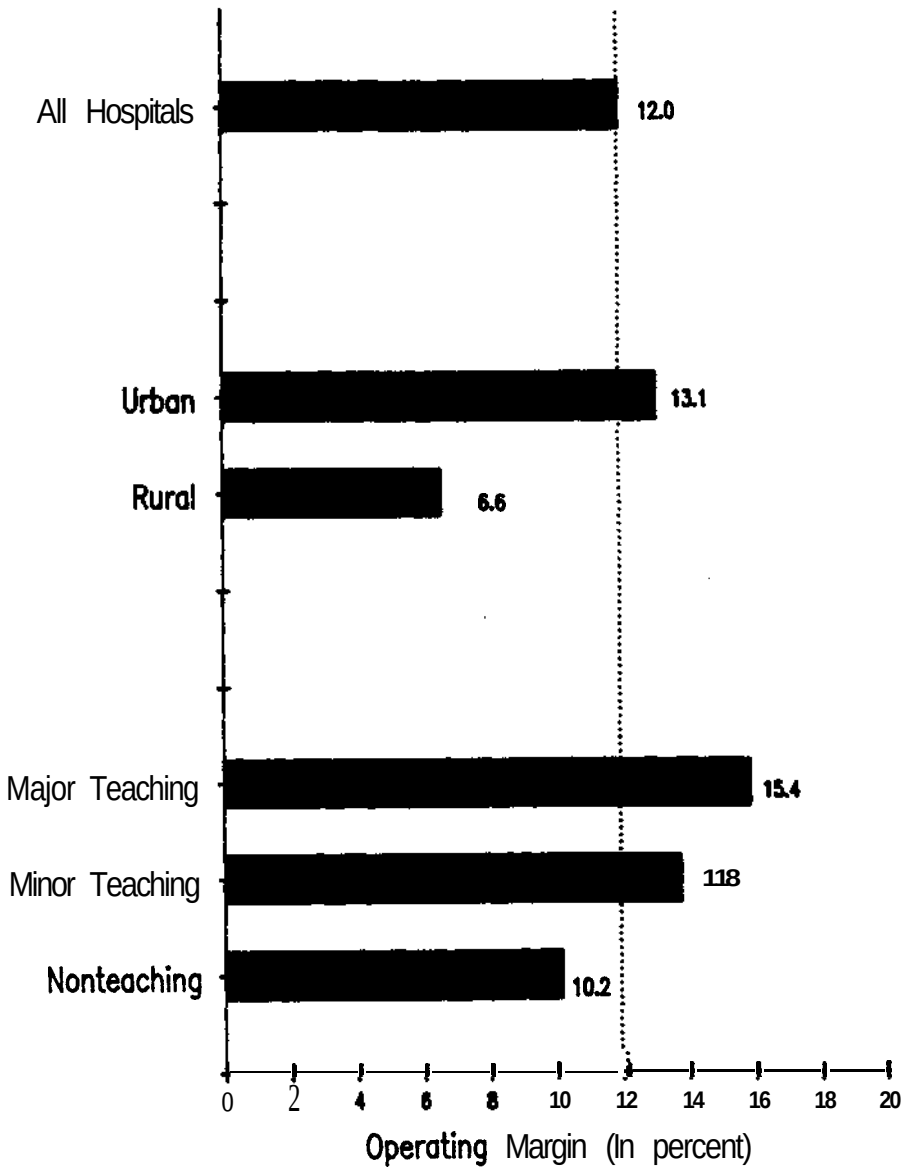
5. Maryland, Massachusetts, New Jersey, and New York hospitals are omitted from these calculations, because they were exempted from the PPS by waiver in 1984. The average margin is calculated by weighting hospitals according to their PPS payments.

FIGURE 1. HOSPITALS' OPERATING MARGINS ON PPS PAYMENTS BY SELECTED CHARACTERISTICS, 1984



SOURCE: Preliminary Congressional Budget Office estimates.

Projected Operating Margins for Fiscal Years 1985 Through 1987

Although it is not yet possible to estimate precisely the operating margins of hospitals on PPS payments after 1984, CBO has prepared some illustrative projections of these margins. These projections make several assumptions about the behavior of costs and payments after 1984—concerning efficiency, scientific and technological advance, and changes in hospitals' average case mix, for example. 6/

Under this range of assumptions, projected average margins for fiscal years 1985 through 1987 are higher than those calculated for fiscal year 1984. As illustrated in Table 1, the estimated margins rose substantially in 1985--from 12 percent in 1984 to approximately 18 percent to 19 percent in 1985. For 1986 and 1987, the estimated margins move downward in two cases. This reduction takes place largely because the legislated updates in payment rates were below the increase in the cost of the market basket by 2.6 percentage points in 1986 and 2.4 percentage points in 1987. The margins remain between about 14 percent and 20 percent in 1987, however. Consequently, hospitals as a group received substantially more in PPS payments than they spent to treat beneficiaries. The lowest estimates of the industrywide PPS surplus from these illustrations are $5.9 billion in 1985, $6.8 billion in 1986, and $5.7 billion in 1987.

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6. For a more detailed description of these assumptions see Statement of Nancy M. Gordon, Congressional Budget Office before the Subcommittee on Health, Committee on Ways and Means, U.S. House of Representatives, February 26, 1987.

If the only additional factor affecting operating margins were the legislated increase in payment rates that is set at 2 percent less than the rise in the cost of the market basket, operating margins for 1988 would be 2 percent lower than the illustrations for 1987. But other factors such as higher or lower costs will also affect the margins. Moreover, their pattern among various types of hospitals will not be the same in 1988 as the pattern shown for 1984 in Figure 1. One reason is that payments will be based entirely on national rates, so they will be redistributed among hospitals with different characteristics. In addition, little is known about how costs may have continued to change differentially among various types of hospitals.

TABLE 1. ILLUSTRATIVE PROJECTIONS OF HOSPITALS' SURPLUSES AND OPERATING MARGINS ON PPS PAYMENTS PER CASE, FEDERAL FISCAL YEARS 1985-1987 a/

Assumptions	Actual 1984 b/	Projections 1985	1986	1987
	Operating Margin (in percent)			
High	12.0	19.4	21.4	19.8
Intermediate	12.0	18.8	18.5	17.3
Low	12.0	17.6	17.2	13.8
	Surplus (in billions of dollars)			
Low b/	2.2 c/	5.9	6.8	5.7

SOURCE: Preliminary Congressional Budget Office estimates.

a. See Appendix Table 1 for details.
b. Comparable estimates for the high and intermediate cases are shown in Appendix Table 1.
c. The amounts for fiscal year 1984 reflect the phase-in of the PPS in that year.

The new data also show that the forecasts of 1984 costs, on which payments have been based between 1984 and 1987, were too high. As a result, hospitals were paid more than was intended. 7/ Hence, there is considerable interest in adjusting the PPS rates to take the newly available data into account--a procedure that is being termed "rebasing."

The Congressional Budget Office is presently examining options for rebasing the PPS rates, but our analysis of this complex subject is incomplete. To respond to your request for information today, however, we have prepared an illustration of one way in which PPS rebasing could be implemented. We will provide the complete analysis as soon as it is available.

The following illustration of rebasing involves two technical steps. In the first step, the 1984 PPS rates are recalculated by substituting data from the 1984 cost reports for the 1981 data that had been projected to 1984. The second step recalculates the 1985-1987 update factors, using current information about conditions in those years, and applies them to the recalculated 1984 rates to produce the rebased 1987 rates.

7. Some of the cost reductions that occurred by 1984 probably represent an additional response to PPS incentives, over and above those under TEFRA, but the amount is unknown.

Recalculating the 1984 Rates

Using data for 1984 to recalculate the PPS rates would lead to about a 16 percent drop in them (see Table 2). The recalculated rates for urban hospitals would be 17 percent lower, and those for rural hospitals 11 percent lower. Of the 16 percent aggregate difference, about 10 percentage points would result from using the 1984 cost data and 6 percentage points would result from using the 1984 case mix data. 8/ Reductions would also take place in both the indirect teaching adjustment, which has been part of the system from the beginning, and the disproportionate share adjustment, which was enacted in 1986. While these adjustments reallocate payments toward the hospitals qualifying for them, they do not affect the overall urban and rural rates.

These estimates convey essentially the same information as the operating margins for 1984 presented in the previous section. In fact, they vary primarily because the difference between the recalculated and the actual PPS rates corresponds to a profit rate, rather than an operating margin, and because the two calculations were based on data from slightly different sets of hospitals. 9/

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8. The original 1984 rates were reduced by 3.1 percent in an attempt to constrain PPS outlays to be the same as they would have been under TEFRA. This adjustment was not applied to the recalculated rates, since they reflect costs that were probably reduced to a greater extent than they would have been under TEFRA.

9. The PPS rates are based on data from 5,501 hospitals, including those in states with Medicare waivers in 1984--New York, New Jersey, Maryland, and Massachusetts. The operating margins for 1984 are based on data that do not include hospitals from these states.

Updating to Fiscal Year 1987

The second step is to inflate the recalculated 1984 rates using new update factors for fiscal years 1985 through 1987. This step serves two purposes.

First, the new update factors incorporate more recent data concerning both inflation and growth in the average case mix of hospitals. More specifically, these update factors are calculated with actual, rather than projected, growth in the cost of the market basket for fiscal years 1985 and

TABLE 2. DIFFERENCE BETWEEN THE RECALCULATED AND THE ACTUAL PPS PAYMENT RATES, 1984 (In percent) a/

	All Hospitals	Urban Hospitals	Rural Hospitals
Overall Difference	-15.9	-17.0	-11.0
Difference attributable to using 1984 cost data	-10.1	-10.6	-7.7
Difference attributable to using 1984 case mix	-5.8	-6.4	-3.3

SOURCE: Preliminary Congressional Budget Office estimates.

a. The current rates are adjusted to reflect a discharge-weighted rather than a hospital-weighted average in order to be consistent with the requirement in the Omnibus Reconciliation Act of 1986 for fiscal year 1988 and beyond.

The overall difference was calculated by substituting both cost data and case-mix data from 1984 for their 1981 counterparts. The portion of this difference change stemming from the 1984 cost data was estimated by substituting only the former. The portion stemming from the 1984 case mix data was estimated by calculating the difference between the two and, therefore, includes a small interaction effect.

1986. Moreover, the new update factor for 1985 reflects the actual increase in case mix for that year--5.7 percent--rather than the projected 2.4 percent used in the original update factor.

Second, the new update factors are structured so that they do not reflect influences that have already been accounted for by using the 1984 data. In contrast, the actual update factors for the 1985-1987 period were reduced in an attempt to reflect both efficiency and case-mix changes that occurred between 1981 and 1984, as data about them became available. Because the new update factors only reflect events in the post-1984 period, the recalculated rates for 1987 do not "double count" efficiency and case-mix changes that occurred in the earlier period.

Even though more information is available about 1985 and 1986, recalculating the update factors for the 1985-1987 period still requires some assumptions. One of them is a method for allocating the gains from greater efficiency between hospitals and the federal government, which acts on behalf of taxpayers and beneficiaries. The specific calculations are shown in Appendix Table 2. This table which also details the implications for the values of the update factors of three possible assumptions about dividing the efficiency gains.

Using the intermediate assumption--that hospitals and the government would share these gains equally--the recalculated update factors would be 4.1 percent lower in 1985, 2.2 percent higher in 1986, and 2.7 percent higher

in 1987, than the actual values. In other words, over the three-year period, the cumulative difference would be less than 1 percent.

Figure 2 shows the effects on PPS payment rates of both the actual and the recalculated update factors. The top line shows actual rates from 1984 through 1987. The bottom line shows the recalculated 1984 rates and their growth through 1987 using the recalculated update factors. Although the paths generated by the two update factors would differ, the relationship between actual and recalculated rates would be essentially the same in 1987 as in 1984. More specifically, the recalculated payment rates for 1987 would be 84.7 percent of their actual levels, compared with 84.1 percent for 1984. In other words, the actual payment rates would remain roughly 15 percent higher than hospitals' costs in 1987. 10/

In effect, the recalculated update factors for 1986 and 1987--which are higher because they do not include the legislated reductions that responded to information about the 1981-1984 period--would be offset by the lower one for 1985. Two factors largely explain the smaller update factor for 1985--the actual increase in the cost of the market basket was lower than projected, and the average case mix of hospitals rose by more than was expected.

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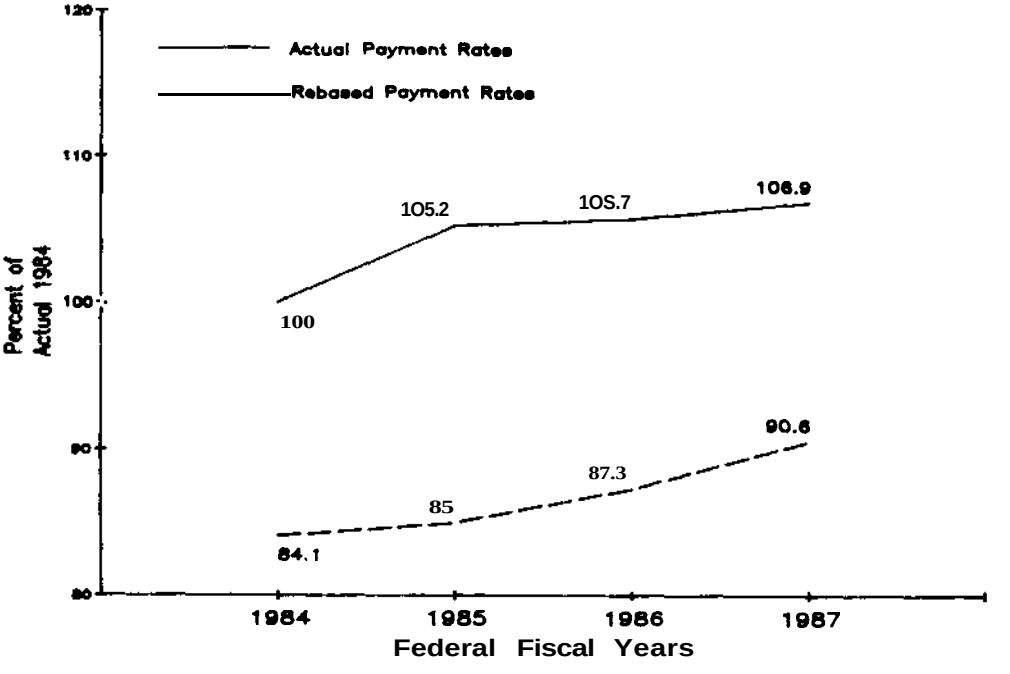
10. Using this methodology, the recalculated rates in 1987 would be 15.3 percent lower overall, 16.3 percent lower for urban hospitals, and 10.3 percent lower for rural ones. Alternatively, new update factors could be calculated separately for urban and rural hospitals, in order to reflect differential changes in efficiency, volume, site shifting, and average case mix in the two types of hospitals.

Figure 2.

Medicare Payment Rates, Actual and An Illustration of Rebased, 1984-1987



PPS Update Factors (In percent) a/

	1985	1986	1987	Cumulative Effect
Actual Update	5.2	0.5	1.15	6.9
Recalculated Update	1.1	2.7	3.8	7.7

SOURCE: Congressional Budget Office.

a. See Appendix Table 1 for details.

IMPLICATIONS FOR ADJUSTING PPS RATES FOR 1988 AND BEYOND

Both the estimated operating margins on PPS payments, and the difference between the recalculated PPS rates and those currently in effect, suggest that the Congress may want to modify the system. The 1984 data would allow technicians to enhance the accuracy of the PPS rates. It would also permit them to improve the adjustments that account for the additional costs of patient care incurred by hospitals with teaching programs and by hospitals that serve a disproportionately large share of low-income patients.

Nonetheless, policy decisions would also be necessary. Most important, the basic issue of how to share gains in efficiency between the government, which acts on behalf of taxpayers and beneficiaries, and the hospital industry cannot be resolved on technical grounds. In addition, we still lack complete information about past years, and setting rates prospectively will always require forecasts of several factors. The remainder of this statement addresses various policy alternatives for setting PPS rates for 1988 and beyond. In doing so, it uses the earlier illustration of rebasing.

In considering various approaches, however, it is important to remember that the goals of the PPS system cannot necessarily be achieved by targeting a particular average operating margin. Many different payment rates and adjustments could be set that would achieve a specified margin, but only one of them would also reflect the legitimate costs of providing care in efficiently run hospitals that have varying characteristics.

Policy Decisions

The decision about setting the rates for 1988 and beyond has two basic components:

- What proportion of the gains in efficiency should go to each party? and
- Should adjustments be made retroactively as new data permit correcting technical errors in setting the payment rates, or should corrections be applied only to rates for future years? 11/

Allocating Efficiency Gains. Representatives of the hospital industry argue that hospitals should retain most or all of the efficiency gains, since this is nothing more than the reward for taking the risk of losses under the PPS. Moreover, they contend that the industry should especially retain these gains in the future. Their reasoning is that the federal government has already claimed much of the efficiency gains achieved in 1984 by setting the update factors for 1986 and 1987 lower than the increase in hospitals' costs. In addition, they maintain that unless hospitals can keep most or all of the future gains, they will have no incentives for continued improvement. They also believe that hospitals need a "cushion" against being adversely affected by continuing deficiencies in the PPS rates. Finally, they argue that uncertainties about some aspects of rebasing--for example, the correct budget-neutrality factor for 1984--also justify hospitals retaining some of the efficiency gains.

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11. Retroactive adjustments would only apply to technical errors, not efficiency gains. It would be inconsistent with the objectives of PPS to remove all previous efficiency gains, since doing so would remove the incentive for efficiency from the system.

Those who favor taxpayers or beneficiaries receiving most or all of the efficiency gains contest the allegation that the government has already claimed the 1984 gains. They argue that the legislative attempts had little or no such impact, as suggested by the illustrative update factors recalculated for 1985-1987. Similarly, the projected margins for those years suggest that the hospitals are retaining most of the efficiency gains. These people also note that the initial PPS rates reflected the inefficiencies that had been fostered under retrospective cost reimbursement and that Medicare should not have to pay for them. In addition, they point out that hospitals would always have incentives for greater efficiency because they would permanently retain part of the efficiency gains. Because of the lengthy delays in data becoming available, hospitals would retain these gains even if the PPS rates were always cut to absorb them as soon as they could be measured. Finally, these people argue that inflating the margins of all hospitals to "cushion" those that are harmed by technical deficiencies in the system is a costly and inefficient approach that should, at most, be done to a limited degree and as a temporary measure.

Making Retroactive Adjustments. Retroactive adjustments involve recapturing overpayments from hospitals or making up underpayments to them to compensate for technical errors in setting the payment rates. Proponents see them as a necessary response to the lengthy lags in the availability of data used in the system. Because the payments must embody many assumptions, they can be thought of as provisional ones, with "settling up" to occur as soon as possible. This approach would not represent a

return to cost reimbursement, because hospitals would remain at risk if they were not efficient and efficiency gains would not be recaptured. Moreover, neither hospitals nor taxpayers would bear the risks associated with the technical limitations in setting the rates--risks that can be substantial. For example, in a period of rapid and unexpected inflation, efficient hospitals would incur much greater costs treating beneficiaries than would be covered by the PPS payments.

Opponents counter that the PPS promised fixed advance payments and that, in the current situation, many hospitals would find it extremely difficult to "settle up" because they have already spent the extra revenues or used them to subsidize lower charges for their other payers. They also believe that the federal government is far more able to deal with unexpectedly high costs than hospitals are able to handle unexpectedly low payments. Therefore, they argue that the issue of retroactive adjustments should be resolved asymmetrically. In other words, they argue that there should be no recapturing of past overpayments, but that any future underpayments to hospitals resulting from technical difficulties should be made up by the federal government.

Specific Alternatives

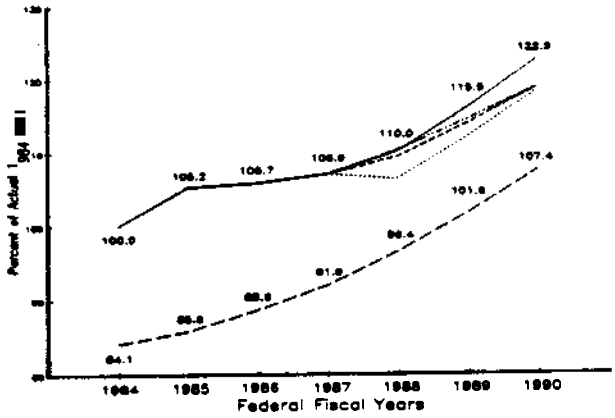
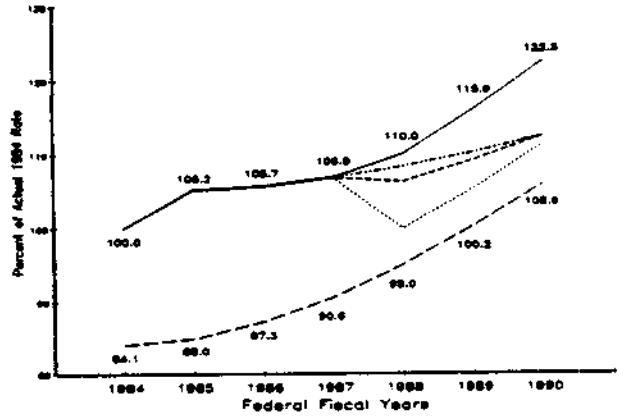
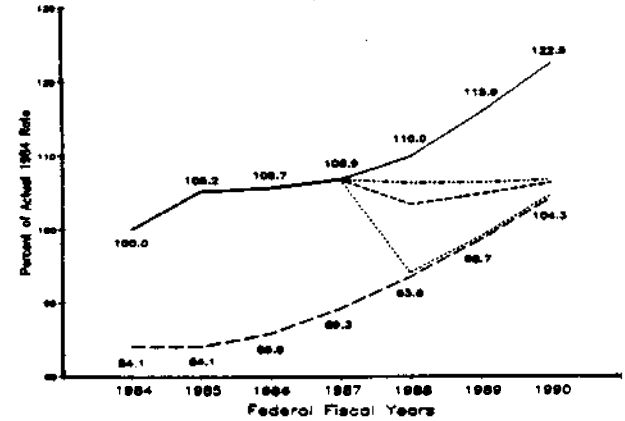
This testimony analyzes three ways of splitting the efficiency gains between the hospital industry and the federal government--one would let hospitals keep all of these gains, another would split them evenly between the parties, and the third would take back the gains on behalf of taxpayers and bene-

ficiaries. All three options assume that two-thirds of the observed cost reductions are the result of gains in efficiency, while the remainder is attributable to site shifting and other factors. (This assumption was employed by ProPAC in calculating its recommended update factor for 1988.) Combining these alternatives with the illustration of rebasing would lead to downward adjustments to the PPS rates totaling 5.3 percent, 10.9 percent, and 16.5 percent, respectively. (Appendix Table 3 shows their derivation.)

An immediate reduction by these amounts might present some hospitals with difficult adjustments, however, particularly if Medicare's payments represent a large proportion of their total receipts and if they have adjusted to the higher reimbursements. In response to this concern, the adjustments could be phased in over a number of years. Two possibilities are examined here: one is "front-loaded"--half the reduction would occur in the first year followed by one-quarter in each of the next two years; and the other would implement one-third of the reduction in each of three years.

The panels in Figure 3 represent the three specific alternatives for dividing the efficiency gains. In each case, the top line shows payment rates (relative to their 1984 levels) under current law and the bottom line shows the recalculated payment rates (again relative to the actual 1984 levels). The latter vary slightly from one panel to another, because each one is consistent with that panel's assumptions about dividing the gains. The intermediate lines show the relative payment rates that would result for

FIGURE 3. CHANGES IN PPS RATES UNDER REBASING AND SPECIFIC OPTIONS FOR SHARING EFFICIENCY GAINS, 1988-1990

Sharing Assumptions	Percent Reduction in Rates
A. Hospitals **Keep** All Efficiency Gains	
	**5.3**
B. Share Efficiency Gains Equally	
	**10.9**
C. Government Keeps All Efficiency **Gains**	
	16.5

SOURCE: Preliminary Congressional Budget Office estimates. See Appendix Table 2 for additional details.

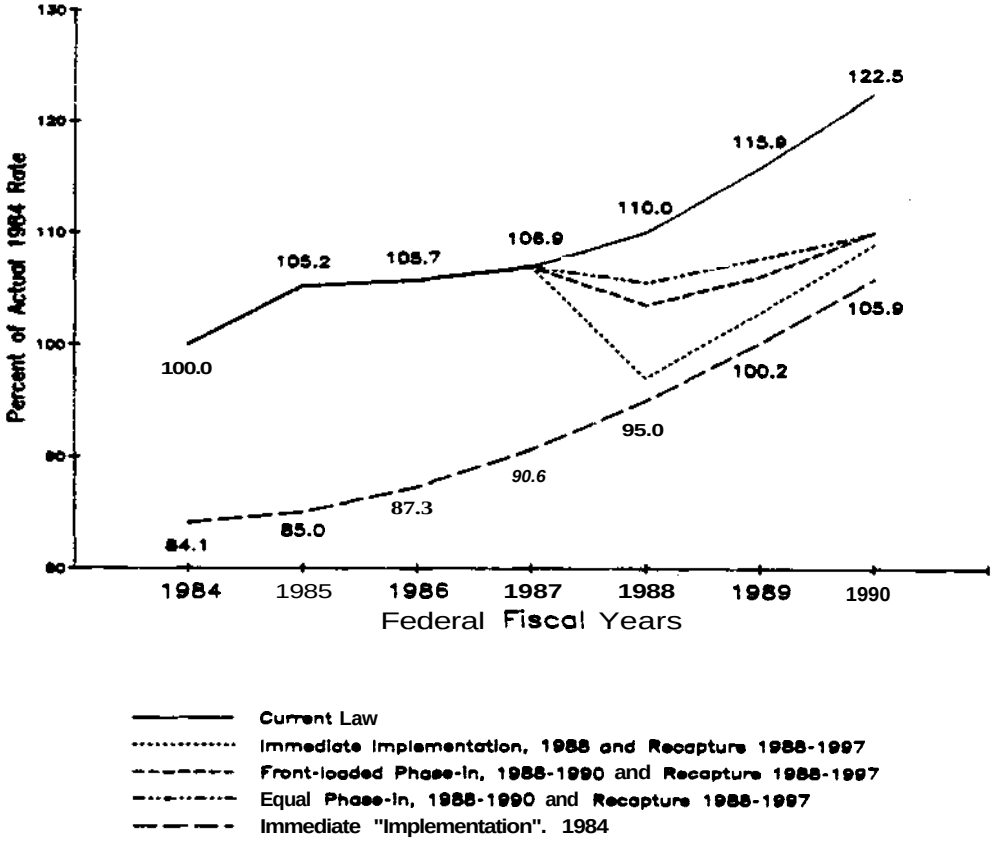
immediate implementation and for the two phase-in alternatives--if rebasing for 1988 were combined with the particular assumption about sharing the gains.

Comparing the three panels shows that the higher the proportion of the efficiency gains kept by the government, the lower the payment rates would be. In some cases, the 1988 payment rates would rise but in other cases, they would be below the 1987 levels. The effects of the phasing alternatives would be small if the hospitals are assumed to retain all the efficiency gains, because the total reduction would be relatively modest. The effects would be substantial, however, in the other two cases.

One final alternative would have the government recapture the portion of the 1984-1987 payments that resulted from technical difficulties in setting the rates, while allowing hospitals to keep all of the past efficiency gains and dividing the future gains evenly between the hospitals and the government. One version of this approach is shown on Figure 4. It would lower 1988 rates by an additional 2.8 percent, if the overpayments were recaptured over 10 years. After that time, the rates would return to the level they otherwise would have attained.

The potential federal budgetary savings of these policy alternatives are shown on Table 3; they would range from $2.5 billion to $20.3 billion for fiscal years 1988 through 1990. For any given percentage reduction in the PPS rates, the savings would be cut by the phase-in options, by as much as

FIGURE 4. CHANGES IN PPS RATES UNDER REBASING, SHARING EFFICIENCY GAINS EQUALLY, AND A RETROACTIVE ADJUSTMENT FOR TECHNICAL FACTORS, 1988-1990



SOURCE: Preliminary Congressional Budget Office estimates.

TABLE 3. REDUCTION IN OUTLAYS FROM ALTERNATIVE DECISIONS ABOUT REBASING AND SHARING EFFICIENCY GAINS, 1988-1990 (In billions of dollars)

Net Adjustment/ Timing of Adjustment	Fiscal Years 1988	1989	1990	1988-1990
5.3 Percent				
Immediate implementation	1.4	1.6	1.8	4.8
"Front-loaded" phase-in a/	0.3	0.9	1.7	2.9
Equal three-year phase-in	b/	0.8	1.8	2.5
10.9 Percent				
Immediate implementation	3.9	4.3	4.7	12.8
"Front-loaded" phase-in a/	1.5	2.9	4.6	9.0
Equal three-year phase-in	0.7	2.5	4.6	7.7
16.5 Percent				
Immediate implementation	6.1	6.7	7.5	20.3
"Front-loaded" phase-in a/	2.6	4.7	7.2	14.5
Equal three-year phase-in	1.5	4.1	7.1	12.7

SOURCE: Preliminary Congressional Budget: Office estimates.

NOTE: All savings estimates are relative to a CBO baseline that uses the legislated update factor of the change in the cost of the market basket minus two percentage points for 1988. In examining these options, the two percentage point reduction under current law was assumed to recognize similar factors as would be corrected by rebasing. Thus, two percentage points were deducted from the alternative adjustments for the purposes of calculating savings for fiscal year 1988.

a. Assumes that 50 percent of the adjustment occurs in the first year and 25 percent in each of the next two years.

b. Less than $0.1 billion.

47 percent, compared with immediate implementation. 12/ Providing a phase-in period only for hospitals in special circumstances--such as those where Medicare represents an unusually high proportion of their total receipts--might be a way to balance the need for budgetary savings with a concern for effects on the financial health of hospitals. If the retroactive adjustment were also made, the budgetary savings would rise by about $1.2 billion in each of the next 10 years.

Combining the illustrative approach to rebasing with a policy decision about splitting the efficiency gains would differentially affect various groups of hospitals. Table 4 shows the percent change in PPS payments for some selected groups, relative to current law, that would occur if the efficiency gains were divided equally between hospitals and the federal government. While rates for urban hospitals would be reduced by 11.8 percent, those for rural hospitals would be cut by only 6.7 percent. Major teaching hospitals would face reductions of 16.7 percent under this option, compared with 11.8 percent for minor teaching hospitals and 9.2 percent for nonteaching hospitals. Finally, rates for hospitals receiving the "disproportionate share" adjustment would fall by 12.8 percent, compared with 9.9 percent for those hospitals not receiving the adjustment. The reductions for hospitals not receiving these adjustments would be smaller than the average, because the drop in indirect teaching and disproportionate share payments would be redistributed to all hospitals.

12. While the particular percentage reductions in the PPS rates used here are only illustrations, the budgetary effects of choosing any one of them are accurate.

TABLE 4. THE DISTRIBUTIONAL IMPACT OF A 10.9 PERCENT REDUCTION IN PPS RATES FROM THE REBASING ILLUSTRATION COMBINED WITH A DECISION TO SHARE EFFICIENCY GAINS EVENLY a/

	Percent of Current Law Payments	Percent of Illustrative Payments	Percent Change Relative to Current Law
All	100	100	-10.9
Urban	83.6	82.9	-11.8
Rural	16.4	17.1	-6.7
Major Teaching b/	10.6	9.9	-16.7
Minor Teaching c/	36.8	36.4	-11.8
Nonteaching	52.6	53.7	-9.2
Disproportionate Share d/	34.3	33.6	-12.8
Nondisproportionate Share	65.7	66.4	-9.9
Teaching			
Disproportionate share	20.5	19.7	-14.7
Nondisproportionate share	26.8	26.6	-11.7
Nonteaching			
Disproportionate share	10.8	10.7	-11.3
Nondisproportionate share	41.9	43.0	-8.6

SOURCE: Preliminary Congressional Budget Office estimates.

a. See text for details.

b. Hospitals that have a ratio of residents to beds exceeding 0.25.

c. Hospitals that have a ratio of residents to beds less than 0.25.

d. Disproportionate share hospitals are those that receive the adjustment designed to compensate for the increased costs of serving a high share of low-income patients.

CONCLUSION

In the last several years, the Congress has made many important decisions that have modified and updated the PPS. Yet the decisions that must be made this year on rebasing and updating are perhaps the most important for the system since it was enacted in 1983. They are critical because of the dollar magnitudes at issue and the precedents that may be set. While technicians can help to narrow the range of choices, some fundamental issues remain--most notably the choice of how efficiency gains are to be shared between the hospital industry and the federal government. The Congressional Budget Office will be pleased to assist you and your staff in analyzing options as they are developed.

APPENDIX

APPENDIX TABLE 1. ILLUSTRATIVE PROJECTIONS OF HOSPITALS' SURPLUSES ON PPS PAYMENTS, FEDERAL FISCAL YEARS 1985-1987 (In billions of dollars)

Assumptions	Actual 1984 a/	Projections 1985	1986	1987
High b/	2.2	6.6	8.4	8.2
Intermediate c/	2.2	6.4	7.3	7.2
Low d/	2.2	5.9	6.8	5.7

SOURCE: Preliminary Congressional Budget Office estimates.

a. The totals for 1984 reflect the phase-in of the PPS for that year.

b. Assumes that post-1984 costs reflect changing input prices and large net cost reductions, and that the average case mix rises by 1.5 percent for 1986 and 1.0 percent for 1987 in excess of case mix-induced cost increases.

c. Assumes that post-1984 costs reflect changing input prices and some net cost reductions, and that the post-1985 average case mix increases are accompanied by matching cost increases.

d. Assumes that post-1984 costs reflect changing input prices and small net cost increases, and that the average case mix rises by 1.5 percent for 1986 and 1.0 percent for 1987 in excess of case mix-induced cost increases.

APPENDIX TABLE 2. A COMPARISON OF ACTUAL AND RECALCULATED PPS UPDATE FACTORS, 1985-1987

	1985	1986	1987	Cumulative Effect
Actual Update	5.2[a]	0.5	1.15	6.9
	Recalculated Update			
Market Basket Increase	4.1	3.1	3.5	
Science and Technology	0.3	1.5	0.7	
Site Shifting [b]	-0.5	-0.7	-0.6	
Within DRG Complexity [b]	0.5	0.6	0.7	
Case Mix Change [c]	-4.6[d]	-2.6	-1.0	
Real Case Mix Change [e]	2.3	1.3	0.5	
Subtotal	2.1	3.2	3.8	
Efficiency A [f]	0.0	0.0	0.0	
Efficiency B [f]	-1.0	-0.5	0.0	
Efficiency C [f]	-2.0	-1.0	0.0	
Recalculated Update A	2.1	3.2	3.8	9.3
Recalculated Update B	1.1	2.7	3.8	7.7
Recalculated Update C	0.1	2.2	3.8	6.1
Recalculated A - Actual	-3.1	2.7	2.7	2.4
Recalculated B - Actual	-4.1	2.2	2.7	0.8
Recalculated C - Actual	-5.1	1.7	2.7	-0.8

SOURCE: Congressional Budget Office calculations.

a. The DRG weights were uniformly reduced by 1.05 percent for fiscal year 1985 so the net update was 4.1 percent.

b. The 1987 components for site shifting and within DRG complexity are based on ProPAC's estimates for its recommended update factors in those years. The 1985 and 1986 components are CBO's assumptions.

c. The estimated case mix increase used for fiscal year 1986 is based on assumptions used by ProPAC in its update recommendations for that year. The 1987 increase is based on CBO's assumptions.

(Continued)

Appendix Table 2 (Continued)

d. CBO calculates that the actual increase in case mix from fiscal year 1984 to 1985 is 5.7 percent. Since the DRG weights were uniformly reduced by 1.05 percent in fiscal year 1985, the net change is 4.6 percent.

e. For fiscal year 1985, 40 percent of the 5.7 percent case mix increase (2.3 percentage points) is assumed to represent real increases in patient complexity and the remainder to represent improved coding. For 1986 and 1987, these two factors are each assumed to account for half of the projected change.

f. CBO assumed that efficiency gains were 2 percent in 1985 and 1 percent in 1986. Under the first alternative (labeled Efficiency A), hospitals would keep all of the gains so the update factors would not be affected. Under alternative B, the gains would be shared equally between the hospitals and the federal government so that the 1985 and 1986 updates would include reductions of 1.0 percent and 0.5 percent, respectively. Under alternative C, the federal government would keep all the efficiency gains, so the 1985 and 1986 updates would be reduced by 2.0 percent and 1.0 percent, respectively.

APPENDIX TABLE 3. ILLUSTRATIVE EXAMPLES OF ADJUSTMENTS TO 1987 PPS RATES BASED ON THE DIFFERENCE BETWEEN THE RECALCULATED AND THE ACTUAL PAYMENT RATES (In percent)

	Hospitals Keep All Productivity Gains	Productivity Gains Shared Equally by Hospitals and the Federal Government	Federal Government Keeps All Productivity Gains
Difference Between Recalculated and Actual Payment Rates a/	-14.0	-15.3	-16.5
Credit for Efficiency Gains b/	8.7	4.4	0.0
Net Adjustment	-5.3	-10.9	-16.5

SOURCE: Preliminary Congressional Budget Office estimates.

a. The difference between current and recalculated rates depends on which update factors were used to inflate the recalculated 1984 rates through 1987. The recalculated update factors differ by the assumptions used in sharing efficiency gains for the 1985-1987 period, which are consistent with the assumptions made about sharing the 1984 gains for the purposes of this table. For example, the update factors for the first column are calculated assuming that hospitals keep all gains; for the second column, the update factors are those detailed on Appendix Table 2, which are calculated under the assumption that gains are shared equally; and those for the third column assume the government receives all the gains.

b. The cost reductions used to calculate efficiency gains are those that result from substituting 1984 costs for 1981 costs in calculating the 1984 rates before applying budget neutrality factors. Therefore, the estimated aggregate cost reduction of 13.1 percent differs from the entry in the second row of Table 2 by the approximate amount of the 1984 budget neutrality factor--3.1 percent. Two-thirds of the total cost reductions are assumed to result from efficiency gains.