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Medicare: Hospital Payment Rates
Should Be Revised to Assure
Reasonableness and Equity

Statement of
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Subcommittee on Health
Committee on Ways and Means
House of Representatives



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SUMMARY

The 1981 data bases used to compute the initial payment rates for Medicare's inpatient hospital prospective payment system (PPS) resulted in inflated rates because these data bases included substantial unallowable costs and costs for unnecessary services. Numerous adjustments have been made to PPS rates in the four subsequent annual updates, and these adjustments were often based on estimated and incomplete data. GAO does not know, nor does it believe others know, what relationship exists between PPS rates and the costs hospitals must incur to efficiently and economically furnish necessary services--the statutory criteria for PPS rates. GAO believes PPS rates should be rebased by using audited cost data that reflect hospital operations under PPS so the Congress can ascertain the reasonableness of the PPS rates.

In addition, there is wide variation in expected treatment costs of the various diagnoses/procedures covered by about a third of PPS's diagnosis related groups (DRGs). Because patients in these wide-variation DRGs are not randomly distributed among hospitals, hospitals can profit or lose based on the type of patients they treat rather than on their level of efficiency. To remove this inequity and prevent Medicare from giving hospitals financial incentives to seek low cost and avoid high-cost patients, GAO believes the DRGs should be modified to eliminate the wide variations in expected treatment costs.

Mr. Chairman and Members of the Subcommittee:

We are pleased that you asked us to be here today to discuss the results of several studies we have done that looked at whether Medicare's hospital prospective payment system (PPS) rates are reasonable from the government's perspective and equitable from the hospital's perspective. First, we can tell you that the original PPS rates were too high because they were based on unaudited cost data that included substantial (1) unallowable costs and (2) costs for unnecessary services. Over the four subsequent annual updates, the PPS rates have been estimated and adjusted many times. Because of this, we do not know, nor do we believe anyone else really knows, whether the current PPS rates are reasonable in relation to "the costs of efficiently and economically providing covered services," the criteria for rates in the statute. We believe that the rates should be rebased by using current audited cost data that reflect hospital operations under PPS so everyone can see that relationship.

Second, because of the wide variation in treatment costs within many of the diagnosis related groups--DRGs--payments among hospitals may be inequitable. Our analysis showed wide variation in the costs of treating patients in about a third of the individual DRGs. Moreover, hospitals did not receive a random distribution of high and low expected cost patients in these wide-variation DRGs. Rather, certain types of hospitals consistently treated patients in the low end of the expected cost

range, while other types consistently treated those in the high end. Thus, whether a hospital profits or loses for the wide-variation DRGs is a function of the hospital's mix of patients within those DRGs as well as its level of efficiency. The extent of intra-DRG variation should be reduced to improve the equity of PPS and to prevent giving hospitals perverse incentives to treat or not treat certain patients.

INITIAL PPS RATES TOO HIGH

When PPS began in fiscal year 1984, the initial rates were based on unaudited cost data and utilization data from fiscal year 1981. Between September 1983 and March 1986, we issued a series of reports discussing the inadequacies of these data bases and why their use inflated PPS rates. The first report¹ dealt with the unallowable costs and unnecessary services for inpatient respiratory therapy services included in the data bases. The second report² addressed the substantial percentage of unnecessary ancillary services included in the data bases. A third report³ discussed the data base problems for cardiac

¹Need to Eliminate Payments for Unnecessary Hospital Ancillary Services, GAO/HRD-83-74, Sept. 30, 1983.

²Excessive Respiratory Therapy Cost and Utilization Data Used in Setting Medicare's Prospective Payment Rates, GAO/HRD-84-90, Sept. 28, 1984.

³Medicare's Policies and Prospective Payment Rates for Cardiac Pacemaker Surgeries Need Review and Revision, GAO/HRD-85-39, Feb. 26, 1985.

pacemaker services. The fourth report⁴ showed that using unaudited cost data inflated PPS rates by more than 4 percent. The fifth report⁵ dealt with the high costs of unnecessary intensive care included in the data bases.

We recommended in March 1986 that HHS rebase PPS rates using cost data that reflect hospital behavior under PPS. HHS basically responded that it would study the problem. Rates have not been rebased, and we continue to believe they should be.

HOW ARE PPS RATES RELATED TO COSTS?

Since the establishment of PPS, rates have had four annual updates. These updates involved numerous adjustments that were designed to assure that the rates met the requirements of the statute to provide payments sufficient to cover the costs of efficiently and economically furnishing needed services. For example, adjustments were made to reflect changes in the overall mix of Medicare patients, improved hospital diagnosis coding, changes in technology and hospital treatment patterns, etc. These adjustments were often based on estimates and incomplete data. Thus, we do not know the relationship between PPS rates and the costs of efficiently furnishing services. But we do believe the government should know what that relationship is because it is vital to knowing whether rates are reasonable. The

⁴Use of Unaudited Cost Data Resulted in Overstatement of Medicare's Prospective Payment System Rates, GAO/HRD-85-74, July 18, 1985.

⁵Medicare: Past Overuse of Intensive Care Services Inflates Hospital Payments, GAO/HRD-86-25, Mar. 7, 1986.

way to find out to collect the current cost data necessary for rebasing.

Finally, much has been said over the last few years about hospital profit margins from their Medicare business. We were not surprised when hospital profits were reported as being high because, in our opinion, there was a lot of fat built into the PPS rate-setting data bases, and it should not have been difficult for hospitals to make a profit. We believe rebasing the rates would show how much of the fat has been cut out and would give the Congress a better understanding of the reasonableness of PPS rates.

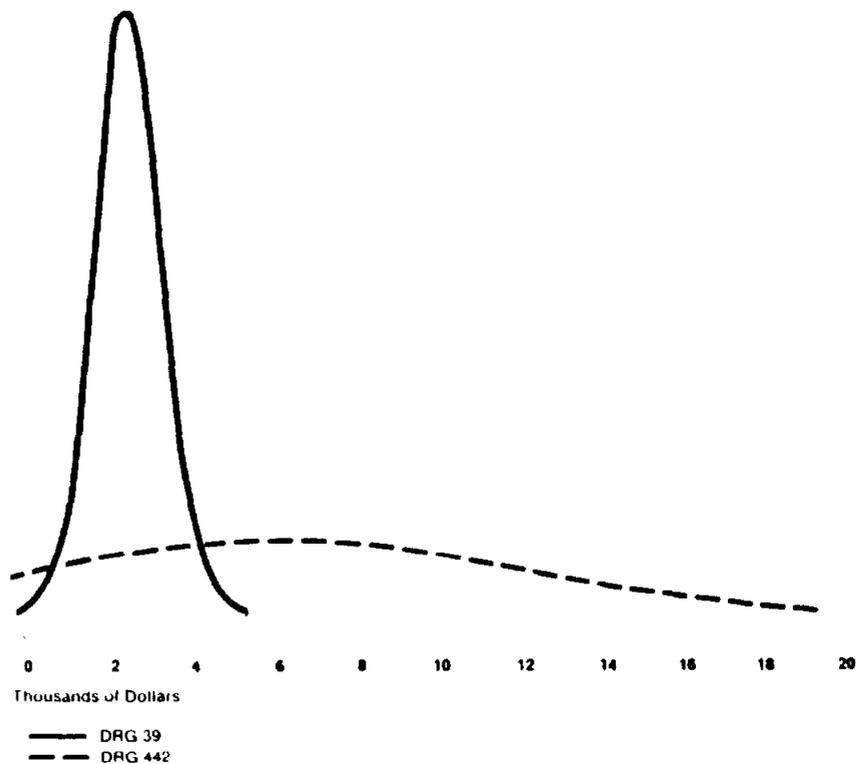
ARE PPS RATES EQUITABLE?

In response to the question of whether PPS rates could be made more equitable, the short answer is yes. We are in the final stages of preparing a report on the equity of PPS rates as measured by intra-DRG variation in average treatment costs for the various diagnoses and procedures covered under individual DRGs.

As you know, one of the primary goals of PPS is equitable payments to the hospitals that treat Medicare beneficiaries. To achieve this goal, it is important that the DRG case classification system accurately group patients with similar treatment costs. We measured the variation in treatment costs within each DRG and found that in 1985, this intra-DRG variation

was at least 90 percent⁶ for 148, or about a third, of the DRGs. Figure 1 shows the expected normal distribution of charges for two DRGs to illustrate the difference between a DRG with low variation in treatment costs and one with high variation.

Figure 1: Expected Normal Distribution of Charges for DRG 39 and DRG 442 (Fiscal Year 1985)



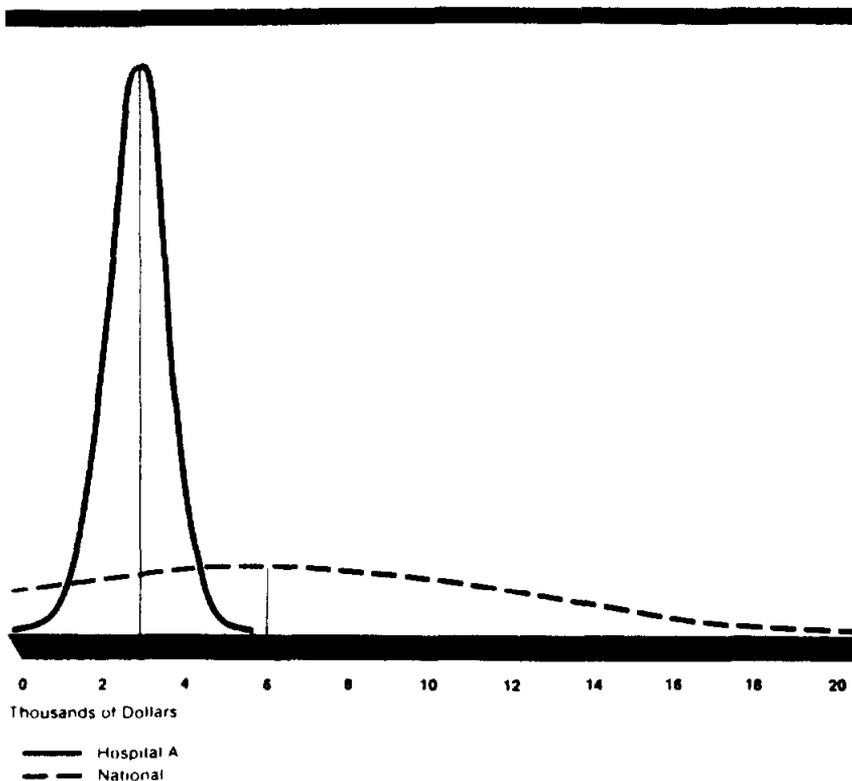
As shown in the figure, DRG 39--a surgical DRG for eye diseases and disorders--had a low variation. This DRG had an overall average for all its procedures of \$2,328, and individual

⁶The coefficient of variation was used to measure variation. It is a standard statistical technique and is the ratio of the standard deviation to the mean of a data set. This ratio is multiplied by 100 and expressed as a percentage--that is, the standard deviation as a percent of the mean.

procedures ranged from \$2,009 to \$2,499, a relatively narrow spread of \$490. On the other hand, DRG 442--a surgical DRG for injuries--had a high variation. It had an overall average for its procedures of \$6,046, but the average for individual procedures ranged from \$1,012 to \$11,948, a wide spread of almost \$11,000.

In itself, such variation would not affect equity if hospitals received a random distribution of patients within the range of expected treatment costs because losses on high-cost patients would tend to be offset by profits on low-cost patients. However, we found that this did not happen. Figure 2 shows the national expected normal distribution of charges for DRG 442 and the distribution for hospital "A." The figure illustrates a hospital that consistently treated patients who had lower-than-average treatment costs in DRG 442.

Figure 2: Expected Normal Distribution of Charges for DRG 442, Nationally and for Hospital "A" (Fiscal Year 1985)



The procedures performed at this hospital in DRG 442 averaged \$2,831, compared with the national average for the DRG of \$6,046. Procedures at this hospital in DRG 442 ranged from \$1,827 to \$5,733.

To assess whether the wide-variation DRGs were causing inequitable payments to hospitals, we first computed the national average cost of each procedure and diagnosis used to assign Medicare patients to each DRG. We call this the expected treatment cost of the diagnosis or procedure. We used these national average diagnosis/procedure costs in conjunction with

the number of patients treated by each hospital to determine the hospital's average expected cost per DRG. This is the cost a hospital would have incurred if it were as efficient as the average hospital in the nation. We then compared this average cost with the amount the hospital would have received if it were paid based on the national average cost of the DRG. In effect, we compared what an efficient hospital's costs would have been to treat its patients with the amount it would have been paid. This analysis resulted in our finding that high and low expected treatment cost patients are not randomly distributed among hospitals. We concluded, therefore, that PPS rates for the wide-variation DRGs are not equitable.

Overall, we found that large urban hospitals tended to treat patients in the high expected treatment cost end of the wide-variation DRGs. Small urban hospitals and rural hospitals tended to treat patients in the low end. For example, table 1 shows the experience of one large urban hospital for DRG 12--degenerative nervous system disorders--one of the wide-variation DRGs.

Table 1: Example of One Hospital's Expected Costs and Payments for Patients Treated in DRG 12 (Fiscal Year 1985)

	<u>Number of patients</u>	<u>Expected total costs</u>	<u>Expected total payment</u>	<u>Profit or loss</u>
Diagnosis costs less than DRG mean cost	12	\$ 28,928	\$ 38,241	\$ 9,313
Diagnosis costs greater than DRG mean cost	<u>100</u>	<u>570,449</u>	<u>318,655</u>	<u>(251,794)</u>
Total	<u>112</u>	<u>\$599,377</u>	<u>\$356,896</u>	<u>(\$242,481)</u>

At this hospital, 100 of the 112 patients treated in DRG 12 had expected treatment costs that were higher than the national average treatment cost for the DRG--a difference of about \$240,000 above the national average. That is, even if this hospital were as efficient as the average hospital, it would still have lost \$240,000 on its patients in DRG 12.

In contrast, table 2 shows that 92 of the 93 patients treated by one rural hospital in DRG 461--another wide-variation DRG--had expected treatment costs that were lower than the national average treatment cost for the DRG--a difference of about \$137,000 below the national average.

Table 2: Example of One Hospital's Expected Costs and Payments for Patients Treated in DRG 461 (Fiscal Year 1985)

	<u>Number of patients</u>	<u>Expected total costs</u>	<u>Expected total payment</u>	<u>Profit or loss</u>
Diagnosis costs less than DRG mean cost	92	\$101,183	\$238,470	\$137,287
Diagnosis costs greater than DRG mean cost	<u>1</u>	<u>2,731</u>	<u>2,592</u>	<u>(139)</u>
Total	<u>93</u>	<u>\$103,914</u>	<u>\$241,062</u>	<u>\$137,148</u>

Two results are possible from such patterns. First, hospitals can profit or lose based on the mix of patients they receive rather than on their level of efficiency as is supposed to occur under PPS. An inefficient hospital can profit if it treats primarily patients in the low end, but an efficient hospital can suffer a loss if it treats patients primarily in the high end.

Second, the wide-variation DRGs give hospitals a financial incentive to treat patients with low expected costs and avoid high cost ones. This could eventually lead to access problems for some patients.

We believe HHS should to take action to reduce the extent of variation in the wide-variation DRGs. Such action would help improve the equity of PPS payments.

This concludes my prepared statement; I will be happy to address any questions you may have.