SECTION 2B

Hospital inpatient and outpatient services

RECOMMENDATIONS

2B-1 The Congress should gradually eliminate the differential in inpatient payment rates between hospitals in large urban and other areas.

***YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1**

2B-2 The Congress should increase the base rate for inpatient services covered by Medicare's prospective payment system in fiscal year 2003 by market basket minus 0.55 percent for hospitals in large urban areas and by market basket for hospitals in all other areas.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

2B-3 For calendar year 2003, the Secretary should increase the payment rates for services covered by the outpatient prospective payment system by the rate of increase in the hospital market basket.

YES: 16 • NO: 0 • NOT VOTING: 0 • ABSENT: 1

***COMMISSIONERS' VOTING RESULTS**

SECTION 2B

In this section

- Assessing payment adequacy
- Update recommendation

Section 2B: Hospital inpatient and outpatient services

We believe that aggregate Medicare payments for hospital acute and post-acute services are adequate as of fiscal year 2002, even after accounting for policy changes legislated for fiscal year 2003 that will reduce payments. Our estimate of the overall Medicare margin for hospital services in fiscal year 2002 is 3.8 percent. Hospital cost increases have been larger in recent years than in the 1990s, but the higher cost growth appears justifiable, primarily reflecting upward pressure on wages. Thus, we have no evidence that the current hospital cost base is inappropriate, and a 3.8 percent margin relative to those costs is within our range of adequacy. Other broad indicators (such as trends in volume and payments from private payers) are also generally consistent with a conclusion of adequate payments. This conclusion supports an update equal to hospital market basket for both inpatient and outpatient services. On the inpatient side, the data on margins and our analysis of costs suggest that maintaining two base payment rates (a 1.6 percent higher rate for hospitals in large urban areas) is unwarranted. Holding the update for hospitals in large urban areas to the legislated level of market basket minus 0.55 percent for fiscal year 2003 while raising it to market basket for all other hospitals would be an appropriate first step to phase out the base rate differential and provide funds to implement MedPAC's previous recommendations for improving payments to rural hospitals.

In this section of the chapter, we begin by assessing the adequacy of current payments for all services that hospitals provide to Medicare beneficiaries. We then address the appropriate allowance for cost increases in the coming payment year for inpatient and then outpatient services. On the inpatient side, we combine the update with recommended changes in the distribution of payments. For a complete description of these payment systems, see Chapter 1.

Assessing payment adequacy

The first part of the process for determining the update for hospital services is to assess the adequacy of aggregate Medicare payments for hospital services relative to the costs of providing these services. Essentially, this means deciding if the total amount of money in the system is about right. In doing this, we first estimate current Medicare payments and costs, then determine whether the current payments are adequate relative to efficient providers' costs.

To estimate current Medicare payments and costs, we begin with a base of 1999 Medicare payments and costs and then project both to 2002. In assessing the level of Medicare payments relative to costs, we first consider the hospital cost base in the 1990s and trends through 2002 to determine whether the current level of hospital costs is appropriate. We then consider the relationship of all payments hospitals receive relative to an appropriate cost base, including a review of broad indicators that go beyond Medicare, to gauge the financial health of the industry. Because Medicare is the largest purchaser of hospital services, Medicare payment adequacy should be reflected in these broad indicators.

Current payments and costs

The relationship of payments to costs is expressed as a margin; the inpatient, outpatient, and overall Medicare margins show the relationship of payments to costs for Medicare services.[1] To estimate margins for 2002, we projected cost per unit of output from 1999 to 2002,[2] applied the payment updates in law through 2002, and modeled other changes in Medicare payment policy including those scheduled to go into effect in fiscal year 2003.[3] Thus, we end up with an estimate of payments relative to costs in 2002 as if 2003 payment rules had been in effect—other than the update for 2003, which is the subject policy decision.

We present the inpatient and overall margins both including and excluding disproportionate share (DSH) payments and the portion of indirect medical education (IME) payments above Medicare's share of teaching costs.[4] Our intent is to show how much money Medicare provides overall, as well as the relationship of core Medicare payments to the costs of services provided to Medicare beneficiaries. DSH payments offset the revenue pressure of treating low-income patients, whose care is typically unpaid or incompletely paid. Although the purpose of IME payments is to reimburse the higher costs of treating Medicare patients in teaching hospitals, we have found analytically that Medicare's IME payments under the IME adjustment formula for 2002 are about twice our estimate of these higher costs. Thus, both DSH payments and IME payments go beyond covering the basic cost of treating Medicare patients.

Although we calculate margins net of DSH payments and above-cost IME payments, we do not intend to imply that hospitals do not receive these payments from Medicare. Medicare margins that include DSH and IME payments measure the full impact of Medicare payments—the alternative calculation simply allows policymakers to focus more readily on how well both core payments for patient care and the additional payments are targeted.

Inpatient Medicare margin

We estimate that the inpatient Medicare margin will be 10.8 percent in 2002 (with 2003 payment rules), down slightly from 11.9 percent in 1999 (Table 2B-1). The largest factor in this decline is the change in IME payments scheduled for 2003, which will reduce Medicare payments to hospitals for inpatient services by about 1.2 percent. In 2002, the margin will range from about 5 percent for rural hospitals to 14 percent for hospitals in large urban areas.[5] The 9-point gap between hospitals in large urban and rural areas is smaller than the 12-point gap in 1999 because the

1 A margin is calculated as revenues minus costs divided by revenues. These margins are based on Medicare-allowed costs. The overall Medicare margin includes the five largest Medicare services: acute inpatient, outpatient, rehabilitation and psychiatric units, skilled nursing facility, and home health agency. It also reflects Medicare payments for direct graduate medical education and bad debts.

2 We projected unit costs for all hospital services on the basis of change in cost per adjusted admission in the American Hospital Association's annual survey of hospitals for 2000 and the Centers for Medicare & Medicaid Services' projected increase in the hospital market basket for 2001 and 2002 (with a small downward adjustment for the effects of length-of-stay decline for acute inpatient services in 2001).

3 We modeled three significant changes in payment policy that will affect the level of payments to hospitals in 2003: a reduction in the indirect medical education adjustment factor from 6.5 percent to 5.5 percent for every 0.1 increment in the intern and resident-to-bed ratio (scheduled for 2003); increased disproportionate share (DSH) payments to rural hospitals (and urban hospitals with fewer than 100 beds) that went into effect in 2001; and increased payments for outpatient services due to transitional corridor payments meant to reduce the losses some hospitals would incur in the transition to prospective payment. The corridor payments are modeled at their 2003 level.

4 DSH payments provide extra funds for hospitals with a large share of low-income patients, defined on the basis of days of care for patients covered by Medicaid and Medicare patients who receive Supplemental Security Income.

5 An urban area is a metropolitan statistical area as defined by the Office of Management and Budget. A large urban area has a population greater than 1 million.

TABLE 2B-1

Inpatient Medicare margin by hospital group, 1999 and estimated for 2002

Hospital group	1999	2002	
		All payments	Without DSH payments and IME payments above costs
All hospitals	11.9%	10.8%	3.1%
In large urban areas	15.8	14.1	5.0
In other urban areas	9.3	8.1	0.9
Rural	3.8	4.9	1.3
Major teaching	22.3	19.5	4.9
Other teaching	11.6	10.4	3.5
Non-teaching	6.5	6.5	1.9

Note: DSH (disproportionate share), IME (indirect medical education). IME payments above costs are payments in excess of Medicare's share of MedPAC's estimate of the cost of teaching. Estimates for 2002 reflect impact of 2003 cut in IME payments.

Source: MedPAC analysis of Medicare cost report data from Centers for Medicare & Medicaid Services (CMS).

scheduled reduction in IME payments will affect hospitals in large urban areas the most and because rural hospitals received most of the increase in DSH payments that went into effect in 2001.

We estimate that for all hospitals, the inpatient margin net of DSH payments and IME payments above the teaching cost relationship will be 3.1 percent in 2002. Urban hospitals—especially those in large urban areas—have higher Medicare margins primarily because they receive most of the DSH and IME payments. Without these special payments, inpatient margins are estimated at 5.0 percent for hospitals in large urban areas and 0.9 percent and 1.3 percent for those in other urban and rural areas, respectively. Many observers have assumed that rural hospitals fare the worst under Medicare's inpatient prospective payment system (PPS), but without DSH payments and above-cost IME payments, rural hospitals actually have a slightly higher margin for inpatient services than hospitals in other urban areas.

Outpatient Medicare margin

We estimate that the aggregate Medicare margin for outpatient services will be –16.3 percent in 2002 (with 2003 payment rules), a small improvement from –17.0 percent in 1999 (Table 2B-2). The outpatient margin is negative largely because of excessive allocation of overhead and ancillary costs to outpatient services. Hospitals had an incentive to overallocate costs to outpatient services because outpatient payments were linked to reported costs while inpatient payments were not. In addition, under payment rules in effect before implementation of the outpatient PPS, outpatient departments were paid a percentage of reported costs, making it impossible for a hospital to have a positive margin.[6] For these reasons, the outpatient margin is more useful as a relative measure over time and among groups of hospitals than as an absolute measure of payment adequacy.

The projected margins assume no behavioral changes in response to the implementation of the outpatient PPS in August 2000. The projected improvement from 1999 to 2002 results from funds added to the system through the transitional corridor payments that limit hospitals' losses under the new payment system. Rural hospitals benefit more from these payments, producing slightly better margins in 2002 relative to urban hospitals.

Overall Medicare margin

The overall Medicare margin incorporates almost all Medicare-related payments and costs to hospitals. The inpatient margin, which covers about 70 percent of Medicare costs, is overstated to some extent because hospitals have generally allocated too little of their overhead and ancillary costs to inpatient services. The margins for other services—including outpatient departments and hospital-based skilled nursing facility and home health services—are therefore understated. By incorporating all services into one measure, the overall Medicare margin controls for this shifting of costs.

We estimate that the overall Medicare margin will be 3.8 percent in 2002, compared with 4.7 percent in 1999 (Table 2B-3). The range among hospital groups

TABLE 2B-2

Outpatient Medicare margin by hospital group, 1999 and estimated for 2002

Hospital group	1999	2002
All hospitals	–17.0%	–16.3%
In large urban areas	–17.2	–17.0
In other urban areas	–16.5	–16.9
Rural	–17.2	–13.7
Major teaching	–18.8	–18.0
Other teaching	–15.7	–15.8
Non-teaching	–17.1	–15.9

Note: Estimates for 2002 reflect impact of transitional corridor payments for 2003 and assume budget-neutral implementation of pass-through payments for new technology.

Source: MedPAC analysis of Medicare cost report data from CMS.

6 Prior to implementation of the outpatient PPS in August 2000, Medicare paid 94.2 percent of operating costs and 90 percent of capital costs.

TABLE 2B-3

Overall Medicare margin by hospital group, 1999 and estimated for 2002

Hospital group	1999	2002	
		All payments	Without DSH payments and IME payments above costs
All hospitals	4.7%	3.8%	−2.2%
In large urban areas	8.1	6.8	−0.4
In other urban areas	2.7	1.7	−4.0
Rural	−3.2	−1.8	−4.4
Major teaching	13.0	10.8	−0.6
Other teaching	5.1	4.0	−1.5
Non-teaching	−0.1	0.0	−3.5

Note: DSH (disproportionate share), IME (indirect medical education). IME payments above costs are payments in excess of Medicare's share of MedPAC's estimate of the cost of teaching. Estimates for 2002 reflect impact of 2003 cut in IME payments and 2003 outpatient policy changes.

Source: MedPAC analysis of Medicare cost report data from CMS.

is similar to that of the inpatient margin—from –1.8 percent for rural hospitals to 6.8 percent for hospitals in large urban areas. The overall Medicare margin has improved for rural hospitals (from –3.2 percent in 1999) because of increased DSH payments and increased outpatient payments under the transitional corridor payment policy. We estimate that the overall Medicare margin net of DSH payments and IME payments above teaching costs will be –2.2 percent in 2002. Excluding DSH payments and above-cost IME payments narrows the gap between large urban hospitals and other urban or rural hospitals, but there will still be a 4-point difference.

The estimate of 3.8 percent for the overall Medicare margin in 2002 (with 2003 payment rules) represents our best estimate of the current relationship between payments and costs in the Medicare payment system. The next step in assessing payment adequacy is to determine whether the costs included in this margin are appropriate.

Appropriateness of current costs

In general, we find no evidence that aggregate hospital costs are too high. In reaching this conclusion, we first considered the long-term trends that established the hospital cost base in the 1990s, and then considered recent trends using preliminary sources of data through 2002.

The growth of Medicare cost per case was modest throughout the 1990s. From 1993 through 1998, this growth was less than the increase in the hospital market basket, and from 1994 to 1996 it was actually negative. Because the hospital market basket measures changes in the prices of the inputs hospitals use to produce patient services, growth in cost per case lower than the market basket—and especially decreases in unit costs—suggests that hospitals' product has changed. This did, in fact, occur: Medicare length of stay fell by about a third from 1990 to 1999, resulting in significantly lower resource use. In an earlier study, MedPAC found that during the period of the largest length-of-stay reductions, each percentage point drop in length of stay resulted in a corresponding 0.8 percent drop in real costs per case (Ashby et al. 2000). Growth in hospital wages was also lower than that of the general economy from 1994 through 2000 (Table 2A-3, p. 52). Because wages are the largest single component of hospital costs, this contributed substantially to the low overall cost growth.

Hospital cost growth began to increase at the end of the 1990s as the decline in length of stay slowed. The length-of-stay decline changed from –5.5 percent in 1996 to –1.4 percent in 1999, causing the growth in cost per case to increase from –0.4 percent to 3.0 percent. The 1999 increase was slightly more than the market basket increase of 2.5 percent. The relatively high cost growth in 1999 may at least partially reflect the effects of large, one-time losses due to divestiture of failing lines of business.

The best indicator of overall unit cost growth in hospitals after 1999 (the last year for which Medicare cost report data are available) is change in cost per adjusted admission, which reflects inpatient and outpatient services as well as all public and private payers. Cost per adjusted admission increased by 2.1 percent in 2000, well below the market basket increase of 3.6 percent.[7] However, it appears that the rate of cost growth increased considerably in 2001,[8] driven largely by hospital wage increases of 5.4 percent, compared with 3.9 percent in 2000 and 2.7 percent in 1999.[9]

7 Calculated with data from the American Hospital Association's annual survey of hospitals.

8 Calculated with data from the national hospital indicators survey, which is jointly sponsored by CMS and MedPAC. We do not quote an exact figure for cost per adjusted admission in 2001 because this estimate is based on a limited sample of about 125 hospitals.

9 Comparison of wage levels for non-federal hospital workers and all civilian workers, using data from the Bureau of Labor Statistics.

Preliminary data from the national hospital indicators survey (NHIS) suggest that over the 3-year period of 1999 through 2001, cost growth was at least modestly above growth in the market basket. In light of wage pressures (driven by the possible emergence of labor shortages), one-time costs, and only small length-of-stay declines, the higher growth appears justifiable. Moreover, with nearly all of hospitals' Medicare lines of business now under prospective payment, hospitals have strong financial incentives to control cost growth. Because the hospital cost base established in the 1990s seemed appropriate and the higher cost growth for hospitals in recent years does not appear excessive, we conclude that the current hospital cost base is within the range of acceptability.

Relationship of payments to costs

We next consider the relationship between all payments to hospitals and the appropriate cost base, resulting in the conclusion that current Medicare payments (as of fiscal year 2002, but reflecting 2003 payment policy) are adequate. This analysis allows us to consider the general financial and economic health of the hospital industry, thus placing Medicare's role for hospitals in context of other relevant factors. We considered hospital volume measures, entry and exit of providers from the market, other payers' payments (especially private payers) and the hospital total margin, and how investors view the hospital market.

Changes in volume

Large increases in volume could indicate overly favorable payment rates, and small ones less favorable rates. We measure hospital volume in terms of total admissions, total days of hospital care, and outpatient visits. Hospitals have shown strong volume growth in recent years. Total hospital admissions grew a cumulative 6.1 percent from 1990 through 2000, despite falling in the early 1990s and not exceeding the 1990 level until 1997. Admissions growth has been comparable for urban and rural hospitals, and the share of admissions that occur in rural hospitals has remained essentially unchanged (15.8 percent in 1990 and 15.6 percent in 1999). Preliminary data suggest that admissions continued to increase in 2001.[10]

Total hospital days decreased about 20 percent from 1990 through 1998, mostly because of the large decreases in length of stay, but increased in 1999 and 2000 by 2.4 and 2.5 percent, respectively, due to stabilization in length of stay and higher admission growth. Preliminary data suggest that total days also have increased in 2001.[11]

Hospital outpatient visits have been increasing steadily for more than two decades; the increase was 73 percent during the 1990s, and nearly 5 percent in 2001. Growth in hospital services (inpatient admissions and outpatient visits, as well as recent growth in total days) suggests that overall payments—of which Medicare constitutes a substantial portion—are probably adequate.

Entry and exit of providers

Significant changes in the number of providers can also indicate the relative health of the hospital market. If payments are too low, some providers may be forced to close; if payments are too high, more providers than necessary may enter or remain in the field. Because Medicare is the largest purchaser of hospital services, entry and exit could be influenced by Medicare payment policy.

Nationwide, hospital closures have been modest in the past decade. From 1990 through 1999 there has been a net reduction of 340 short-term acute care hospitals: 440 closed (254 urban and 186 rural) and 100 opened or reopened. Although the number of hospitals has fallen by 6.5 percent, the reduction in total hospital capacity was much smaller because the closed hospitals were generally small and had low occupancy rates and very low volumes (OIG 2001).

Closed hospitals tend to be in areas with low levels of demand for hospital services, while hospitals open each year in areas with excess demand. Closures do not appear to reflect deficient Medicare payments; urban and rural hospitals have closed at rates proportional to their shares of the market and closed hospitals have comparable Medicare and Medicaid utilization rates with other hospitals (OIG 2001). The Office of Inspector General found that hospital closures have not affected access to care for Medicare beneficiaries in most cases (OIG 2001). Although Medicare beneficiaries in rural areas may face greater challenges accessing hospital services due to greater travel distances for health care, MedPAC has not found significant differences in rural beneficiaries' use of care relative to urban beneficiaries (MedPAC 2001).

Both closures and openings have increased in recent years. In 1999, 64 short-term acute care hospitals closed while 22 opened or reopened, compared with 43 closing and 14 opening or reopening in 1998. There have been additional reopenings due to Medicare's critical access hospital program, which supports low-volume hospitals in isolated areas through full-cost payment for inpatient and outpatient services. This program appears to have improved access to care in these rural communities.

The total number of hospitals in the United States appears at least adequate; in 1999 the national occupancy rate was only 54 percent. Increased volume of hospital services—in both admissions and total days—also supports this notion.

10 The NHIS shows that total discharges grew 2 percent in fiscal year 2001.

11 The NHIS shows that total days grew 1.9 percent in fiscal year 2001.

Payments from other payers and total margins

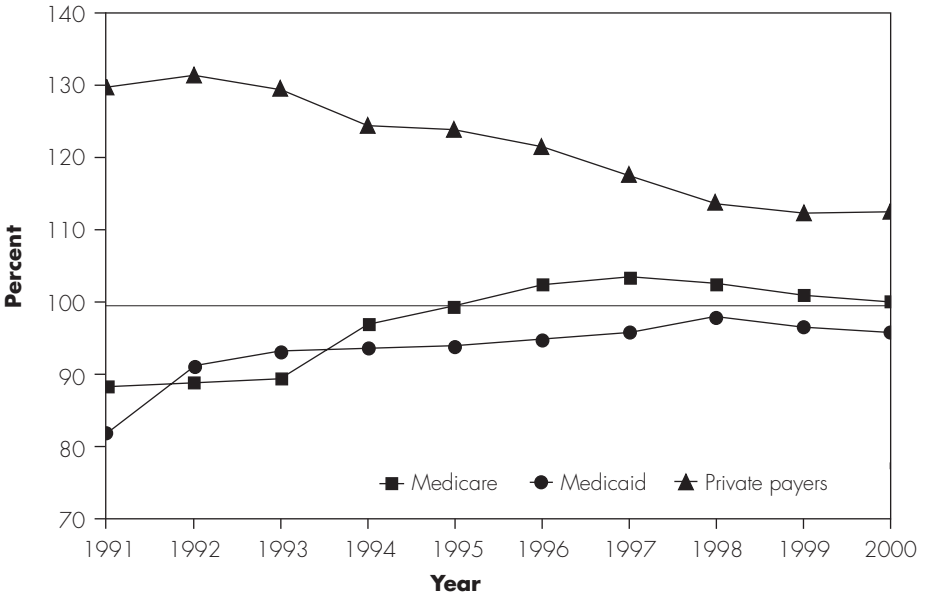
Although Medicare is the largest single purchaser of hospital services, private payers collectively purchase a slightly greater proportion of hospital services (43 percent, compared with 36 percent).[12] In 1998 and 1999, payments fell relative to costs for both private payers and Medicare (Figure 2B-1), resulting in increased revenue pressure and decreased total margins for hospitals. The downward trend in private sector payments may not be continuing, however, as the payment-to-cost ratio for private payers increased in 2000. This turnaround contributed to a rise in total hospital margins, which has provided further evidence that overall hospital revenues remain adequate.

The increase in private payer payments in 2000 was most pronounced for urban hospitals, for which the payment-to-cost ratio increased a full percentage point, compared with a decrease of two points for rural hospitals. The higher urban ratio suggests that these hospitals began to negotiate better payments from managed care payers. Improved negotiations may also be due to greater consolidation among hospitals, thereby increasing market power, as well as to changes in the private insurance market in 1999 and 2000, as preferred provider organizations (PPOs) began to supplant health maintenance organizations (HMOs) as the dominant private insurance model. PPOs have weaker negotiation leverage than HMOs, which should result in improved payments to hospitals.

The increased payments from private payers bring urban hospitals closer to the relatively high level of payments received by rural hospitals throughout the 1990s. Rural hospitals collected at least 134 percent of costs from private payers in each year from 1990 through 1999. The higher private sector payments received by rural hospitals, as well as the recently improved private payments for urban hospitals, have helped to maintain the adequacy of hospitals' overall revenues.

FIGURE 2B-1

Hospital payment-to-cost ratios for Medicare, Medicaid, and private payers, 1991–2000



Note: Payment-to-cost ratios cannot be used to compare payment levels because the mix of services and cost per unit of service vary across payers. They do, however, indicate the relative degree to which payments from each payer cover the costs of treating that payer's patients. Data are for community hospitals and reflect both inpatient and outpatient services. Imputed values were used for missing data (about 35 percent of observations). Most Medicare and Medicaid managed care patients are included in the private payers category.

Source: MedPAC analysis of data from the American Hospital Association annual survey of hospitals.

The total margin reflects the relationship of all hospital revenues—from all payers and including both operating and non-operating revenue—to all costs (including Medicare non-allowed costs). The hospital total margin dropped to 3.6 percent in 1999, the lowest level since the beginning of the decade. About 37 percent of hospitals had negative total margins in 1999. But margins have risen since then, to 4.7 percent in 2000 and 4.5 percent in 2001 (Table 2B-4). Hospitals in other urban and rural areas have significantly higher total margins than those in large urban areas (Table 2B-5). This pattern is

TABLE 2B-4

Trend in hospital total margin, 1998 through 2001

Fiscal year	Medicare cost report	National hospital indicators survey
1998	4.3%	4.3%
1999	3.6	2.7
2000	N/A	4.7
2001	N/A	4.5

Note: N/A (not available).

Source: MedPAC analysis of Medicare cost report data from CMS and national hospital indicators survey.

12 Measured in terms of share of total hospital costs, based on data from the 2000 American Hospital Association annual survey of hospitals.

TABLE 2B-5 **Hospital total margin by hospital group, 1999**

All hospitals	3.6%
In large urban areas	2.7
In other urban areas	4.6
Rural	4.8

Source: MedPAC analysis of Medicare cost report data from CMS.

the opposite of that for Medicare margins, which are by far the highest for hospitals in large urban areas.

Access to capital

Like most businesses, hospitals depend on access to capital to improve their equipment and physical plants. Nonprofit hospitals often raise money by issuing municipal bonds, making bond ratings an important indicator of their access to capital, while stock price may provide a better indicator for investor-owned hospitals. Investors appear to have had a favorable view of both nonprofit and for-profit hospitals in recent years, and this view seems to be holding steady through 2002.

About 85 percent of short-term acute care hospitals are nonprofit; access to capital for nonprofits is therefore a good indicator of financial health for the hospital industry. Although downgrades in nonprofit hospital bond ratings exceeded upgrades each year from 1999 through 2001, the hospital bond market appears fairly sound. The total number of downgraded hospitals and systems each year represents a small proportion of rated hospitals. As of January 2002, more than 90 percent of nonprofit hospitals and systems rated by Standard and Poor's, Moody's, and Fitch were rated investment grade (and therefore could be purchased by mutual funds, university endowments, pension funds, and other institutional investors). Further, downgrades in 2001 were fueled by a renewed commitment by hospitals to invest in capital improvements, and not by poor financial condition as in earlier years. The total value of nonprofit health bond issues increased by over 30 percent in 2001 (to about $23 billion), and the longer-term benefits of this renewed investment should offset the shorter-term strains on investment ratings (Sweeney et al. 2002).

The major bond rating services predict that in 2002, hospital ratings volatility will stabilize and possibly improve (Sweeney et al. 2002, Gordon et al. 2002). Industry reports have cited improved negotiations with private payers and improved Medicare payments as indicators of strong financial performance (Sweeney et al. 2002). Most nonprofit hospitals appear to have adequate access to capital, although raising capital may have become more expensive in recent years for some hospitals due to downgraded bond ratings.

For-profit hospitals have generally enjoyed strong investment ratings by financial analysts over the past two years. The value of stock in for-profit hospitals increased nearly 80 percent from January 1, 2000 through January 1, 2002 (Salomon Smith Barney 2002). Over the same period, the Standard and Poor's 500 (a comprehensive index of stock prices) lost 21 percent.

On balance, the favorable view of the hospital market by investors, encompassing both the nonprofit and for-profit sectors, suggests a financially sound industry. This would in turn suggest that hospitals' revenues are adequate.

Conclusion on payment adequacy

Our review of trends found no evidence that the hospital cost base is inappropriate, and our best estimate of Medicare payments relative to these acceptable costs is an overall Medicare margin of 3.8 percent in 2002 (reflecting 2003 payment rules). A margin of 3.8 percent is within the zone of payment adequacy, especially given that the broad indicators of financial health in the hospital industry do not provide evidence of insufficient revenues. Therefore, the Commission concludes that Medicare payments are adequate, and that no adjustment for payment adequacy is needed as part of the fiscal year 2003 update for either inpatient or outpatient services.

Base rate differential for inpatient payments

In Medicare's inpatient PPS, the base payment rate for hospitals in large urban areas (metropolitan areas with more than 1 million people) is 1.6 percent above the payment rate for other hospitals. Current data do not support this differential. We believe that payments and costs would be better aligned with a single base rate than with the two-rate system currently in place. Eliminating the differential would improve payment equity across geographic areas and also help to simplify the payment system.

RECOMMENDATION 2B-1

The Congress should gradually eliminate the differential in inpatient payment rates between hospitals in large urban and other areas.

The current payment differential reflects policy decisions made more than a decade ago. When the Congress established the inpatient PPS, payment rates for rural hospitals were set 20 percent below those for urban hospitals and no distinction was made between hospitals in urban areas based on the population of the metropolitan area. This initial differential was intended to reflect cost differences between urban and rural hospitals not accounted for by factors included in the new payment system.[13]

Starting in 1988, the Congress made separate updates for hospitals in large urban, other urban, and rural areas, effectively creating three separate payment rates while also substantially reducing the difference in base payment rates between rural and urban hospitals.

13 The differential was based on actual cost differences observed in the base data establishing the PPS payment rates.

Hospitals in large urban areas received higher updates at the time because analysis showed that the higher costs of those hospitals were not fully recognized by PPS payment policies.

In 1990, the base rate for rural hospitals was 7.0 percent lower than the rate for other urban hospitals. The rate for large urban hospitals was 1.6 percent higher than the other urban rate (the current differential). The Omnibus Budget Reconciliation Act of 1990 set update factors to eliminate the gap between payment rates for rural and other urban hospitals by fiscal year 1995, partly because analysis showed that rural hospital costs were 40 percent below those for urban hospitals while aggregate payments were 45 percent lower. As of 1999, rural hospital costs were 37 percent lower than large urban costs, but payments remained 45 percent lower. Costs for hospitals in other urban areas are 11 percent below those of the large urban group, but payments are 18 percent lower.

Medicare margin data provide support for eliminating the current differential. Both inpatient and overall Medicare margins for rural and other urban hospitals are substantially lower than for large urban hospitals (Table 2B-1, p. 59). This differential in performance is due in large part to the higher payment rates received by hospitals that qualify for DSH and IME adjustments; such hospitals are more likely to be located in large urban areas. However, even after removing DSH payments and the portion of the IME payment above the measured cost relationship, hospitals in large urban areas still have Medicare margins that are about 4 percentage points higher than other urban and rural hospitals (Table 2B-3, p. 60). The current differential in base payment rates accounts for about half this difference in margins. Hospitals in large urban areas also benefit from the current lack of an occupational mix adjustment in the wage index, which may explain a significant portion of the remaining differential.[14] Greater competition in large urban areas may also have helped to hold down costs.

Medicare inpatient margins vary widely and tremendous overlap occurs in the distribution of margins across geographic areas, although the distribution of margins for hospitals in large urban areas tends to be higher than for hospitals in other urban or rural areas (Figure 2B-2). The overlap in the core margin (excluding DSH payments and IME payments above the cost relationship) is even greater (Figure 2B-3). Rural hospitals have a greater share of providers with margins over 20 percent, but large urban hospitals' performance still tends to be better than other hospitals across the rest of the distribution. For example, 49 percent of other urban hospitals and 46 percent of rural hospitals have a negative core inpatient margin, compared with 37 percent of large urban hospitals.

Statistical analysis also supports eliminating the differential in base payment rates. When hospitals in large urban areas are compared with all other hospitals, no relationship between large urban location and costs per case is apparent after controlling for cost-related payment adjustments in the inpatient PPS. We found that rural hospitals' costs were about 2 percent lower than those of large urban hospitals, but this analysis is based on 1997 data and does not account for the 2 percent higher cost growth experienced by rural hospitals between 1997 and 1999.[15] If the analysis was run using 1999 data, the cost difference between hospitals in large urban and rural areas would likely be much smaller, if not nonexistent.

Providing one base rate for all hospitals would also eliminate the need for geographic reclassification for the base rate. For base rate reclassification, a hospital must demonstrate that it is close to an area with a higher base rate and that its costs are closer to the amount it would be paid if it were reclassified than to the amount under its current classification.[16] In other words, a hospital with case-mix adjusted costs above its base rate can be reclassified, whereas a hospital with costs below its base rate cannot. This policy produces potentially undesirable incentives by rewarding high-cost hospitals with higher payment rates without the fulfillment of any other criteria demonstrating the need for the higher base rate.

Update recommendation

With our conclusions that current payments for all hospital services are adequate but the higher base rates for inpatient services in large urban areas should be eliminated, we now turn to the question of the appropriate update for inpatient and outpatient services in fiscal year 2003. The update must account for the expected increase in efficient providers' costs, and the Commission's policy is that the adjustment for this factor should equal the forecasted increase in the appropriate measure of price inflation barring compelling evidence that other factors should be explicitly addressed.

Inpatient services

In the PPS for acute inpatient services, Medicare maintains separate procedures to update payments for operating costs (such as labor and supplies) and payments for capital costs (primarily buildings and equipment). The Congress sets the update for operating payments, usually several

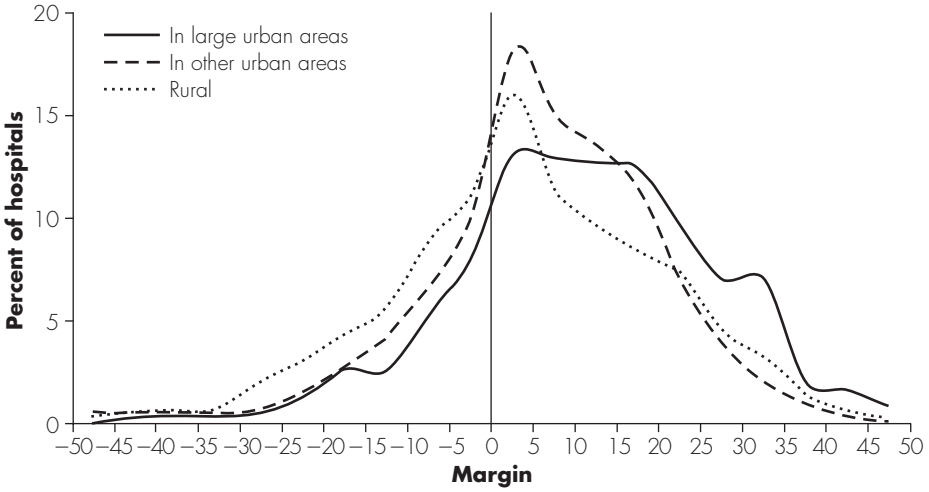
14 The current wage index reflects differences across geographic areas in the mix of labor used. For example, geographic areas that employ an above-average proportion of registered nurses may have higher average hourly wages than other areas, and this difference in labor mix is reflected in the current wage index. An occupational mix adjustment, which the Congress mandated in the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 but will not be implemented until about fiscal year 2005, would allow the wage index to reflect differences in the relative price for labor rather than the mix of labor.

15 Our cost analysis found no statistically significant difference in costs between hospitals in large urban and other urban areas.

16 Rural hospitals must be within 35 miles and other urban hospitals must be within 15 miles of the area to which they wish to be reclassified. In addition, they must demonstrate that at least 50 percent of their employees reside in that area. Sole community and rural referral hospitals do not need to meet the proximity criterion; they only need to demonstrate higher costs.

FIGURE 2B-2

Distribution of inpatient Medicare margin by hospital location—including DSH payments and IME payments above costs, 1999

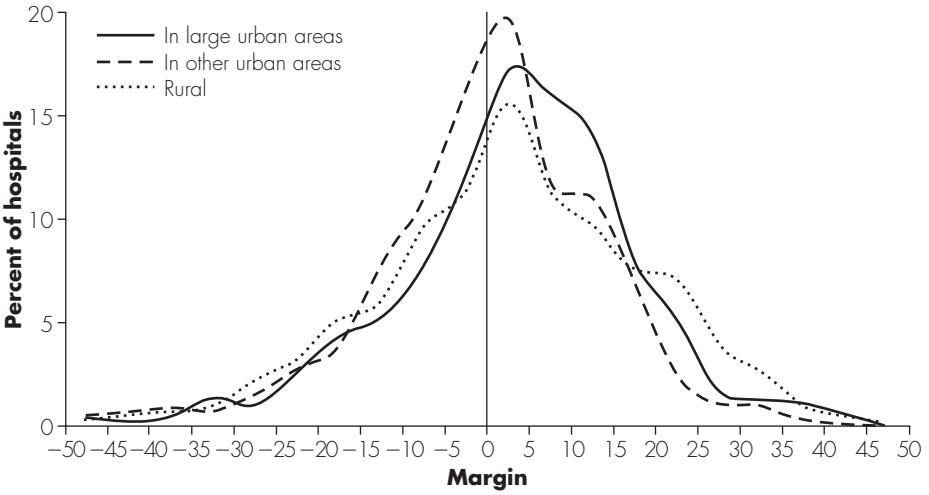


Note: DSH (disproportionate share), IME (indirect medical education). IME payments above costs are payments in excess of Medicare's share of MedPAC's estimate of the cost of teaching.

Source: MedPAC analysis of Medicare cost report data from CMS.

FIGURE 2B-3

Distribution of inpatient Medicare margin by hospital location—excluding DSH payments and IME payments above costs, 1999



Note: DSH (disproportionate share), IME (indirect medical education). IME payments above costs are payments in excess of Medicare's share of MedPAC's estimate of the cost of teaching.

Source: MedPAC analysis of Medicare cost report data from CMS.

years in advance, while the Centers for Medicare & Medicaid Services (CMS) sets the capital update annually through regulation.

When the 10-year phase-in for the capital PPS ended last year, MedPAC recommended that CMS combine operating and capital payments, which would set the stage for a unified update (MedPAC 2000). With the two updates remaining separate, however, we focus on the operating update in this report—not only because it involves more money (applying to 92 percent of hospitals' Medicare costs), but also because it commands the most attention in Congress.

In formulating our update recommendation, we focus first on the appropriate adjustment to account for cost increases in the coming year and then recommend a way to combine this adjustment with important redistributional changes.

Accounting for cost increases next year

CMS's tool for measuring price inflation for the goods and services that hospitals use in producing inpatient services is the hospital market basket index. Separate indexes are maintained for operating and capital costs. CMS's latest forecast of the operating market basket for fiscal year 2003 is 2.9 percent, and under current law, the update will be market basket minus 0.55 percent, or 2.35 percent.[17]

Several other factors besides inflation could affect efficient providers' rates of cost growth in the coming year. Technological advancements will undoubtedly increase costs, but hospitals should also be able to improve their productivity at least modestly without affecting quality of care. We have no evidence that technological advancement cannot be adequately covered through productivity gains. In past years, changes in coding practices for diagnosis related groups (DRGs) and changes in intra-DRG case complexity played major roles in cost and payment trends, and therefore were a

17 This forecast reflects historical data through the third quarter of 2001.

major factor in developing update recommendations. But we have no reason to expect that such changes are occurring today. Preparation for bioterrorism may increase costs, but the steps hospitals will take and their cost implications are not yet known. In addition, the Congress may provide funding for this purpose outside of Medicare because the benefits will accrue to the entire U.S. population.

In the past several years, the most important factor in our update recommendations has been unbundling of the per-case payment unit. Unbundling occurs when hospitals shift the latter days of inpatient stays to various post-acute settings. Although we have no way of measuring its effects directly, unbundling is strongly suggested by the substantial drop in acute hospital length of stay that has occurred over the last decade, coupled with a simultaneous increase in the use of various forms of post-acute care. The Commission recommended a series of downward adjustments for this factor because the shift of care to other settings reduced hospitals' costs much more than it reduced Medicare's payments.

Under our new updating approach, the effect of unbundling in past years is considered in the course of assessing the adequacy of current payments. In light of the fact that Medicare length of stay declined 10 years in a row through 1999 and appears to have declined further through 2001, it might be reasonable to predict that we will experience another drop in fiscal year 2003.[18] If length of stay did fall again, we would expect it to reduce the rate of cost growth and therefore the payment update required. However, the declines have been shrinking in recent years and we have no information on fiscal year 2002.

Therefore, we believe it would not be prudent to take change in length of stay into account prospectively.

After considering all factors that might potentially affect the rate of growth in efficient providers' costs, we conclude that the appropriate adjustment for cost growth in fiscal year 2003 is the forecasted increase in the market basket, or 2.9 percent.

Phasing out the differential in base rates

Based on the conclusions reached thus far, the appropriate update for hospital inpatient services in fiscal year 2003 would be the forecasted increase in the hospital market basket, which is 0.55 percentage points higher than the update in law. Rather than change the current update across the board, however, we believe the additional 0.55 percent increment should be devoted to implementing redistributional changes. This includes a first step in closing the gap in base rates between hospitals in large urban and all other areas, as recommended above, and providing the funding needed to implement inpatient payment changes that MedPAC has already recommended for rural hospitals.

A reasonable first step in eliminating the base rate differential would be to raise the update for hospitals in other urban and rural areas from the current market basket minus 0.55 percent to market basket, while leaving the legislated update in place for hospitals in large urban areas. This would eliminate about one-third of the 1.6 percentage point gap between the two base rates, without changing the increase in payments that hospitals in large urban areas expect.[19] On a weighted basis, the change would raise payments for all hospitals by 0.3 percent. The approach implies a three-year phase-out of the differential, but we plan to wait until next year, when more recent cost and payment data are available, to recommend an appropriate second step.[20]

RECOMMENDATION 2B-2

The Congress should increase the base rate for inpatient services covered by Medicare's prospective payment system in fiscal year 2003 by market basket minus 0.55 percent for hospitals in large urban areas and by market basket for hospitals in all other areas.

In our recent rural report, we made four recommendations designed to increase inpatient payments for rural hospitals (MedPAC 2001):

- The Secretary should fully implement the policy of excluding from the hospital wage index salaries and hours for teaching physicians, residents, and certified registered nurse anesthetists.
- Also for the hospital wage index, the Secretary should reevaluate current assumptions about the proportions of providers' costs that reflect resources purchased in local and national markets.
- The Congress should require the Secretary to develop a graduated adjustment to the base payment rates for hospitals with low overall volumes of discharges.
- The Congress should raise the cap on the disproportionate share add-on a rural hospital can receive from 5.25 percent to 10 percent.

The first two recommendations are budget neutral, but based on simulations done for our report, we estimate that the last two

18 Two-year cohort data from the national hospital indicators survey, which MedPAC and CMS sponsor, documented a small drop in length of stay in both 2000 and 2001, but a sample of only 125 hospitals was available for this analysis.

19 For capital payments, the difference in base rates is 3.0 percent rather than 1.6 percent. Although we are focusing primarily on the operating update in this section, CMS should also eliminate about one-third of the differential in setting the update for capital payments.

20 At a minimum, the currently available 1999 data will be extended to 2000 for decision making in the next cycle. We are hopeful that CMS will be able to return to its normal processing schedule, in which case preliminary 2001 data will also be available.

would raise payments across all hospitals by 0.2 percent.[21] As shown in Table 2B-6, our update recommendation coupled with these rural recommendations would raise aggregate payments by approximately market basket. As planned, however, this set of policies would have a markedly different effect by geographic area. The payment increase would be 2.3 percent for hospitals in large urban areas, 3.0 percent for those in other urban areas, and 4.7 percent for rural hospitals.

Outpatient services

Although we considered payment adequacy for hospitals as a whole, the structure of Medicare's payment systems requires a separate update for services provided under the outpatient PPS. The Balanced Budget Act of 1997 mandated the development of a new PPS for outpatient services and legislated updates for 2000 through 2002. Barring additional legislation, the Secretary will set the update for 2003.

As concluded above, MedPAC finds no evidence that current Medicare payments to hospitals are inadequate. Therefore, no adjustment to the update is needed to better align payments with costs. We have also looked at factors likely to affect hospitals' costs for outpatient services in 2003, such as changes in input prices, technological advancements, increases in productivity, and the implementation of a new payment system. While we have considered all available information, we note that this is a new payment system (first implemented in August 2000), and CMS has not made systematic data from hospitals operating under the PPS available.

RECOMMENDATION 2B-3

For calendar year 2003, the Secretary should increase the payment rates for services covered by the outpatient prospective payment system by the rate of increase in the hospital market basket.

TABLE 2B-6

Operating payment update and impact of MedPAC's rural recommendations for hospital inpatient services, fiscal year 2003

Hospital group and payment component	Percent	Relation to market basket
Hospitals in large urban areas		
Payment update	2.35%	MB − 0.55%
Impact of rural recommendations	−0.1	
Overall payment increase	2.25	MB − 0.65
Hospitals in other urban areas		
Payment update	2.9	MB
Impact of rural recommendations	0.1	
Overall payment increase	3.0	MB + 0.1
Hospitals in rural areas		
Payment update	2.9	MB
Impact of rural recommendations	1.8	
Overall payment increase	4.7	MB + 1.8
All hospitals (weighted average)		
Payment update	2.65	MB − 0.25
Impact of rural recommendations	0.2	
Overall payment increase	2.85	MB − 0.05

Note: MB (market basket). Updates and rural recommendations apply only to Medicare's inpatient prospective payment system (PPS). The Centers for Medicare & Medicaid Services' (CMS) forecast of the hospital operating market basket for fiscal year 2003 is 2.9 percent, and the current law update for all hospitals covered by the inpatient PPS in 2003 is MB − 0.55 percent, or 2.35 percent.

MedPAC has previously recommended a combined update for operating and capital payments. Because the operating update is set legislatively while the capital update is specified through regulation by CMS, this table covers only the operating update.

For more information on MedPAC's recommendations for rural hospitals, see MedPAC 2001.

Source: Data from CMS and MedPAC analysis.

After considering the adequacy of current payments, MedPAC's general approach to accounting for changes in efficient providers' costs in the next payment year is to use the forecasted market basket increase, barring compelling evidence that some other factor should be explicitly taken into account. As with the inpatient update, the appropriate index is the hospital market basket. The outpatient update will be implemented January 1, in contrast to October 1 for the inpatient update. The latest forecast of the hospital market basket for calendar year 2003 is 3.0 percent (slightly higher than the fiscal year forecast).

In addition to increases in the prices of inputs, other factors may influence costs in 2003. In particular, technological advancements may increase or decrease costs. As described in Chapter 1 and discussed further in Chapter 3, most new outpatient technologies that increase costs will be paid for explicitly through two special provisions: new technology ambulatory payment classifications (APCs) and pass-through payments.

21 This estimate does not reflect any change in assumptions regarding the shares of resources purchased in national and local markets for the wage index, because the results of a CMS study of the labor share issue would be needed before a policy change could be formulated.

The new technology APCs pay for completely new services. These payments are not budget neutral, which means payments are made for these new technology services when they are provided, resulting in increased spending. Therefore, the costs of technological advances in the new technology APCs do not need to be taken into account in determining the update.

The pass-through payments, however, are implemented in a budget-neutral fashion (analogous to the recalibration of relative weights among services). This means that payments for all services are reduced to fund the pass-through payments and no additional funds are provided to cover the increased costs associated with new technologies covered by this provision. Therefore, the net increase in costs due to these technologies, after taking into account any technologies that decrease costs, should factor into the update. Although considerable technology costs flowed through the pass-through mechanism in 2002, a sharp reduction in pass-through costs is expected in 2003 as most, if not all, technologies eligible for pass-through payments in 2002 will be fully incorporated into base payment rates by that time.

While technological advances may increase or decrease costs, increases in productivity decrease costs. In the absence of compelling data to the contrary, we assume that increases in costs from new technologies are offset by improved productivity. We think this is a conservative assumption that is likely to benefit hospitals, given that both CMS and industry representatives predict a limited number of pass-through technologies will be approved in the coming years.

Another consideration in updating payment rates for the outpatient PPS is the costs and savings associated with implementing a new payment system. On the one hand, increased costs will be incurred for establishing information systems and training staff to code claims accurately. Many of these costs should be one-time costs incurred in 2001 and 2002, and are, therefore, not relevant to the update for 2003. On the other hand, experience with the inpatient PPS has shown that hospitals tend to control costs more carefully during transition periods due to the uncertainty associated with moving to a new payment system. Furthermore, in a manner analogous to the inpatient PPS, the APC system may provide hospitals with a tool for measuring the costs of outpatient services, as well as a direct incentive to control costs, leading to better cost control. The net impact of the new payment system on the costs of outpatient services in 2003 is uncertain; therefore, we do not make any assumptions for our update recommendation.

Early experience from implementing the inpatient PPS showed that improved coding led to increased payments. Given concern over the adequacy of coding for outpatient services in the data used to set payment rates under the PPS, we expect that reported case mix will also increase in the first years of the new outpatient payment system due to improved coding. For example, in the data used to set payment rates, many hospitals undercoded clinic visits by assigning them all the lowest-intensity code because payment was not tied to coding. The PPS, however, gives hospitals an incentive to correctly code visits according to their intensity by establishing three payment categories. Because we do not have data documenting changes in reported case mix, it is difficult to factor them into our update recommendation for 2003, but in the future we will consider such changes. ■

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