PUTTING MEDICARE IN CONTEXT:
HOW DOES THE BALANCED BUDGET ACT
AFFECT HOSPITALS?

Stuart Guterman
Principal Research Associate
Health Policy Center
The Urban Institute

July 2000

The author is grateful to the National Health Policy Forum for its support in producing this paper. The analysis presented in the paper also was supported by the Urban Institute and the Council on the Economic Impact of Health System Change. The opinions expressed herein are the author's alone and do not necessarily reflect those of the Urban Institute or the other organizations that supported this work. Any errors contained in the paper similarly are the author's sole responsibility.
PUTTING MEDICARE IN CONTEXT:
HOW DOES THE BALANCED BUDGET ACT AFFECT HOSPITALS?

When it was enacted, the Balanced Budget Act of 1997 (BBA) was expected to produce $112 billion in Medicare savings in the first five years (federal fiscal years 1998 through 2002), reducing the projected annual growth rate in program spending from the 8.8 percent baseline estimate to 5.6 percent (Congressional Budget Office 1997). In fact, Medicare spending has grown much more slowly than anticipated: by March 1999, estimated spending for that five-year period was $84 billion less than was expected when the BBA was enacted, and the annual rate of increase was down to 3.9 percent (Congressional Budget Office 1999). There was particular concern about declines in payments for hospital inpatient, skilled nursing facility (SNF), and home health agency (HHA) services, as well as disruptions in the new Medicare+Choice program that was intended to offer expanded private plan options to Medicare beneficiaries (Medicare Payment Advisory Commission 1999).

In response to this concern, the Congress passed the Balanced Budget Refinement Act of 1999 (BBRA), which modified some of the provisions in the BBA that affected payments to providers and plans, adding an estimated $11 billion to Medicare spending in fiscal years 2000 through 2002. Despite this legislation, the latest estimate of program spending in the first five post-BBA years has fallen another $28 billion; estimated Medicare spending for this period is therefore a total of $224 billion (18.2 percent) below the original baseline projection (Congressional Budget Office 2000). This has raised questions about the impact of reduced Medicare payments on the continued viability of the providers and plans that serve the program’s beneficiaries.

Comparing trends in estimated Medicare payments with a budget baseline, however, does not necessarily indicate the real impact of the policy changes that have taken place since the BBA. First, "savings" do not necessarily indicate actual reductions in payment levels, although they frequently are misinterpreted that way; they only indicate that spending will be lower than if current law were unchanged. Second, the baseline projection--which is based on the assumption that current law and regulations will continue indefinitely--frequently is an artifact of the budget process. Current law often includes provisions that never were intended to take effect, but were included in previous legislation to inflate future spending estimates and provide easy "savings" in subsequent legislation.

Third, the impact of any change in Medicare provider payments can be meaningfully evaluated only by examining the corresponding costs incurred by those providers. (Of course, not only the actual but also the appropriate level of costs must be considered.) Finally, Medicare does not function in isolation, but as part of an intricate pattern of cross-subsidization among payers, providers, patients, and services. As this pattern shifts over time, the effects of individual policy changes may also vary, and assessing their implications may be more complex than first appears.
This paper focuses on the effects of the recent changes on the nation's hospitals, including both acute care inpatient facilities and the growing number of other facilities that are part of hospital-based systems. In fiscal year 2000, hospital inpatient and outpatient services account for $100 billion in Medicare fee-for-service benefit payments—almost three-fifths of the total for the program. Moreover, in addition to these acute care services, the variety of post-acute and other services provided by hospital-based facilities account for another $26 billion in Medicare fee-for-service payments. Therefore, although the site of care has shifted from the inpatient to other settings, hospitals still are involved in the vast majority of care received by Medicare beneficiaries.

The objective of this analysis is to put the changes brought about by the BBA (and the BBRA) in a broader context. First, this paper briefly reviews the circumstances that prevailed at the time the legislation was being formulated and debated, and discusses the rationale for its provisions. Then, an estimate of the impact of the BBA on the adequacy of payments under Medicare's acute care hospital inpatient prospective payment system (PPS), which is the single largest component of Medicare payments to hospitals, is presented. These results are combined with estimates of the BBA's impact on other Medicare hospital payments to examine Medicare's ability to cover the costs of treating its patients. Finally, Medicare is put in the context of trends in overall hospital payments and costs, to highlight the roles of other payers. This analysis is used to illustrate the types of pressures that hospitals face in today's health care financing environment, and to identify the implications for policy.

HOW THE (MEDICARE) WORLD LOOKED IN 1997

Over the years, one of the most effective forces driving changes in Medicare payment policy has been the imminent insolvency of the Medicare Hospital Insurance (HI) Trust Fund. The HI Trust Fund, which is used to pay for hospital inpatient services, is financed through payroll taxes at a fixed percentage of earnings. By contrast, the Medicare Supplementary Medical Insurance (SMI) Trust Fund, which is used to pay for physician and other ambulatory services, is financed by a combination of enrollee premiums and general tax revenues, set each year to meet the next year's expected costs. Unlike the SMI Trust Fund, then, the HI Trust Fund's annual revenues and expenses generally do not coincide, and it could run out of money, raising the question of whether and how the corresponding services would be paid for.

Each year, the Social Security and Medicare Trustees report on the recent and projected performance of the Trust Funds under their purview. Several times in the past two decades, these

1 This estimate is derived from data presented in an analysis by the Lewin Group (2000).

2 For the remainder of this paper, unless otherwise stated, all of the estimates presented reflect both the BBA and the BBRA.

3 The derivation of the estimates presented here are described in more detail in Guterman (forthcoming).
projections have indicated imminent insolvency for the HI Trust Fund, and each time the Congress took major action (Aaron and Reischauer 1995). In the early 1980s, insolvency was projected before the end of that decade, and the Congress responded first with the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) and then with the Social Security Amendments of 1983. TEFRA tightened the limits on payments for acute care hospital inpatient operating costs and called for the development of a PPS to cover those costs; the Social Security Amendments of 1983 enacted that PPS. These actions strengthened the HI Trust Fund, but by the early 1990s, it was again faced with insolvency before the end of the decade. The Omnibus Budget Reconciliation Act (OBRA) of 1993 again tightened hospital payments, but the Trust Fund's prospects remained bleak. A balanced budget bill passed by the Congress in 1995 contained major changes in the Medicare program, but agreement could not be reached between the legislative and executive branches and the bill was vetoed.

By the Spring of 1997, the HI Trust Fund was projected to become insolvent during fiscal year 2001—which was only four years away (Figure 1). Moreover, this deficit was expected to accelerate: by fiscal year 2006—in less than a decade—the obligations of the Trust Fund would exceed its assets by well over $400 billion, with the surge in baby boomer retirees not yet having begun.

In every major category, Medicare spending per enrollee was exceeding general inflation, but some categories were rising faster than others (Figure 2). Whereas physician and acute care hospital inpatient services—both of which had been put under prospective payment systems—were going up at relatively moderate rates, hospital outpatient services—payments for which still were based mostly on facility costs—were increasing at almost 10 percent per year between 1990 and 1996. SNF and HHA services—which were paid costs subject to a fairly loose limit—were rising much faster: skilled nursing at more than 20 percent annually and home health at a rate of almost 30 percent. The major factors behind these increases were somewhat different; payments per day was the primary source of growth in skilled nursing spending, while utilization was driving the growth in home health spending, with both the number of people served and the number of visits per person rising rapidly (Health Care Financing Administration 1998; Prospective Payment Assessment Commission 1997).

Despite the slower rate of increase in hospital inpatient spending, however, it still accounted for the largest share of Medicare expenditures, and correspondingly the largest share of the increase expected over the coming years—almost one-third of the total (Figure 3). For this reason, hospital payments continued to attract attention as the debate over new legislation developed. Moreover, although the growth in PPS payments per discharge had slowed considerably—to 3.6 percent per year between 1992 and 1997, compared with 6.1 percent per year over the previous five years—costs per discharge had slowed even more (Figure 4). In fact, costs per discharge actually were lower in 1997 than they were in 1992.

---

4 The acute care hospital inpatient PPS originally included only payments for operating costs; payments for capital costs were brought under the PPS beginning in fiscal year 1992. The data referred to in this paper include both operating and
Figure 1. Actual and Projected Balances in Medicare Hospital Insurance Trust Fund, 1995-2006 (As of April 1997)

* Trustees' estimate based on intermediate assumptions.

Figure 2. Annual Rate of Growth in Medicare Payments Per Enrollee, By Type of Service, Fiscal Years 1990-1996

- Hospital Inpatient: 5.2%
- Hospital Outpatient: 9.9%
- Physician: 4.4%
- Home Health: 27.9%
- Skilled Nursing: 23.2%

Figure 3. Components of Projected Increase in Medicare Fee-for-Service Payments, Fiscal Years 1996-2002 (As of January 1997)

- Hospital Inpatient: 31%
- Home Health: 20%
- Skilled Nursing: 12%
- Physician: 7%
- Other fee-for-service: 15%
- Hospital Outpatient: 15%

Figure 4. Cumulative Increase in PPS Payments and Costs per Case, 1984-1997

SOURCE: Medicare Cost Report data.
As a result, the aggregate Medicare hospital inpatient PPS margin, which measures the difference between payments and costs as a percentage of payments for all hospitals combined, rose steeply (Figure 5). By 1997, the PPS margin was 17.0 percent—the highest ever, and 19.4 percentage points higher than its low point only six years previously. Moreover, without a change in the payment rules, the PPS margin was projected to exceed 20 percent by 2002.5

THE BBA AND PPS PAYMENTS

The BBA contained a number of provisions that affected Medicare payments for acute care hospital inpatient services (Table 1). These provisions were expected to produce savings of $32 billion over five years and reduce the annual growth of PPS payments from the 3.0 percent baseline projection to 0.6 percent.

Although the expected increase in PPS payments was moderate even before the BBA, these provisions reflected a concern that payments did not reflect the costs of the product that Medicare was purchasing. As mentioned above, there had been an increasing discrepancy between PPS payments and costs. At the same time, there had been a sharp decline in average length of stay for Medicare acute care hospital patients (Medicare Payment Advisory Commission 1998a).

Reduced length of stay does not necessarily indicate a problem; in fact, it was one of the anticipated benefits of the PPS when it was implemented (Health Care Financing Administration 1986). But this change was occurring while the role of the inpatient hospital stay in the continuum of care was evolving. As the technology of care advanced, many procedures were becoming less invasive, decreasing the time and intensity of care required for recuperation; in addition, hospitals increasingly were discharging patients to other settings, where they could receive care that was both more appropriate and less expensive.

Although this trend could be thought of as representing an appropriate alignment of clinical and financial considerations, it also raised the question of whether the package of services provided by the hospital during a stay corresponded any longer to the one that was used to set the price that Medicare paid. PPS rates had been set based on average costs in the early 1980s and updated to reflect incremental changes in the product hospitals produced and how they produced it; a more fundamental change in the nature of the hospital product would require a rethinking of the way both absolute and relative rates were set. An analogy is the market for hand-held calculators; technological change has sharply reduced the cost of production while increasing the quality of capital payments and costs.

5 To provide additional perspective as to the magnitude of these PPS margins, note that, prior to the implementation of prospective payment, Medicare reimbursed hospitals for their allowed costs (some of which were subject to limits). This would imply that a measure equivalent to the PPS margin would have been no greater than zero before the PPS began.
Margins based on payment rules in effect prior to BBA, with costs assumed to rise at one percentage point less than the PPS market basket index (MB-1).

Table 1. Estimated Savings from PPS Provisions in the Balanced Budget Act of 1997

<table>
<thead>
<tr>
<th>Provision</th>
<th>Estimated Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPS Operating Update</td>
<td>$17.1 billion</td>
</tr>
<tr>
<td>PPS Capital Payment Rates</td>
<td>5.3</td>
</tr>
<tr>
<td>Indirect Medical Education (IME) Payments</td>
<td>5.6</td>
</tr>
<tr>
<td>Disproportionate Share Hospital (DSH) Payments</td>
<td>0.6</td>
</tr>
<tr>
<td>IME and DSH Adjustments to Outlier Payments</td>
<td>2.2</td>
</tr>
<tr>
<td>Hospital Discharges to PPS-Excluded Facilities and Post-Acute Care</td>
<td>1.3</td>
</tr>
<tr>
<td>Other PPS Provisions</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

Total Impact on PPS Payments                                               $31.9 billion

the product. Manufacturers have been rewarded handsomely for their increased productivity, but
they do not receive the same prices they did in 1984.

As for the discrepancy between PPS payments and costs, it was quite large. In 1997, hospitals
received an estimated $82.1 billion in PPS payments from Medicare and its beneficiaries.\(^6\) The
PPS margin of 17.0 percent implies that those payments exceeded Medicare-allowed inpatient
costs by $13.9 billion. Moreover, this PPS payment surplus could be expected to increase
steadily under the baseline assumptions, totaling $85.0 billion in 1998 through 2002 (Figure 6).
Modeling the impact of the BBA indicates that it would have reduced this amount by $40.0
billion over the five years--a greater reduction than initially was projected, but still less than half
the expected difference between PPS payments and costs. The BBRA had relatively little effect
on payments in the initial BBA period (an increase of $0.9 billion), because it did not take effect
until fiscal year 2000.

A key factor in estimating the BBA's effect on hospitals is the rate of cost growth throughout the
period. If cost growth is slow, hospitals can remain financially viable in the face of constrained
revenues; if cost growth is more rapid, more revenues will be needed to support the same level of
services. In this analysis, it is assumed that costs per discharge will rise each year at a rate of one
percentage point less than the PPS hospital market basket index, which measures inflation in the
prices that hospitals pay for the goods and services they use. The forecast annual rate of increase
in this index between 1997 and 2002 is 3.0 percent, implying cost growth of 2.0 percent per year.
This compares with a decline of 0.3 percent per year between 1992 and 1997 (the five years
preceding the BBA), which was 3.0 percentage points less than the average increase in the
market basket index (Medicare Payment Advisory Commission 2000). The most recent data
indicate that costs per discharge went up 1.5 percent, or 1.1 percentage points less than the
market basket index, in 1998.

The net effect on the PPS margin reflects the amounts described above (Figure 7). Under the
current payment rules, and assuming that hospital costs per discharge rise at an annual rate of 2.0
percent, the PPS margin would be 10.5 percent in 2002--substantially lower than the baseline
margin of 20.8 percent, but still in double digits, and comparable with the margin in 1995.\(^7\)

**OTHER MEDICARE HOSPITAL SERVICES**

As mentioned above, hospitals provide to Medicare beneficiaries a growing volume of services
other than acute inpatient care. Between 1990 and 1996, the number of outpatient visits at

---

\(^6\) Author's own estimate, based on analysis of Medicare Cost Report and American Hospital Association data.

\(^7\) Consistent with most of the other estimates in this paper, this figure incorporates the effects of both the BBA and the
BBRA. As noted above, however, the BBRA had relatively little impact on hospital inpatient payments during the initial
post-BBA period (1998 through 2002). The estimated PPS margin in 2002, for example, would have been 10.4 percent
without the BBRA, only 0.1 percentage points less than the current estimate.
Figure 6. Estimated Effects of BBA and BBRA on Medicare Hospital Inpatient PPS Payments, 1998-2002

Baseline surplus*  | BBA effect  | BBRA effect

* Difference between projected pre-BBA baseline inpatient PPS payments and costs, with costs assumed to rise at MB-1.

Figure 7. Estimated Effect of BBA and BBRA on Medicare Hospital Inpatient PPS Margin, 1998-2002

* Margins based on payment rules in effect prior to BBA and after BBRA, with costs assumed to rise at MB-1.

community hospitals increased by 46 percent and the ratio of outpatient visits to inpatient days jumped from 1.3 to 2.3 (American Hospital Association 2000). The number of hospital-based SNFs rose by 82 percent, and the number of hospital-based HHAs by 68 percent, over that same period (Prospective Payment Assessment Commission 1997). Moreover, the number of rehabilitation facilities went up by 29 percent, and the number of long-term care hospitals by 106 percent.

The relationships among these services—both how and to whom they are provided and how they are paid for—correspondingly have become increasingly complex. With acute hospital inpatient services paid a fixed PPS rate per discharge but other services reimbursed according to the costs incurred by the facility (at least in part or subject to some limit), there was a strong incentive for hospitals to acquire access to or expand their use of such services. This may have improved patient care by better coordinating the services provided in different settings, and it may even have reduced overall health care costs; at the same time, it led to increased Medicare spending. Hospital outpatient, skilled nursing, and home health services combined accounted for less than one-quarter of Medicare spending in 1996, but almost half of the projected increase between 1996 and 2002.

As a result, the BBA contained several provisions that made major changes in the way these services were paid. New prospective payment systems were mandated for SNFs, hospital outpatient departments, home health agencies, and rehabilitation facilities. In addition, payments to rehabilitation, psychiatric, long term care, children's, and cancer facilities exempt from the acute care hospital inpatient PPS were tightened and an interim payment system was put into place for home health agencies until a home health PPS can be implemented. These provisions were expected to produce $36 billion in Medicare savings over five years.

Since the BBA was passed, several of these provisions have been changed, in fact or in law. Although the SNF PPS was implemented in July 1998, as specified in the legislation, the other new payment systems have not yet begun. The BBRA made some changes in the SNF PPS as well as the current payment rules for most other facilities and mandated the implementation of prospective payment for psychiatric and long term care facilities. These BBRA provisions were expected to produce a total of $6 billion in additional Medicare spending (relative to what was expected in the aftermath of the BBA) in fiscal years 2000 through 2002.

There has been considerable turmoil among the providers of many of these services since the BBA. Although no general problem with access to needed services has been identified at this point, the new SNF PPS was criticized for underpaying facilities for certain types of patients and many home health agencies have gone out of business (General Accounting Office 1999b; General Accounting Office 1999a). The instability of this situation, and the paucity of current information about the relationship between hospitals and post-acute care providers, makes it difficult to ascertain the impact of these changes on hospitals' payments and costs. To include those services in this analysis, data provided in the Lewin Group's report for the American
Hospital Association (AHA) have been used to derive the impact of the recent legislation on hospitals' overall Medicare payments and costs (Lewin Group 2000).8

Combining these data indicates substantial cross-subsidization even across the various Medicare services provided by hospitals.9 While hospitals receive payments in excess of their Medicare-allowed costs for services included under the acute care inpatient PPS, they lose money on their other Medicare services (Figure 8). The net effect of these surpluses and shortfalls was a $9.2 billion Medicare surplus for hospitals in 1997, but this overall figure masks the distortions in incentives that may be created by overpayment for some services and underpayment for others.

It also must be noted that some of the services that are provided to Medicare patients are not counted as costs by Medicare; these may include private rooms, televisions, and other services for which hospitals are allowed to charge patients, but also other costs that are higher than the limits Medicare places on them or are offset by Medicare accounting rules. It is difficult to ascertain the role these additional costs play in determining hospitals' financial conditions, but a heuristic estimate of their net effect on hospitals overall is 4.4 percent of Medicare-allowed costs.10 Under this assumption, hospitals are estimated to have spent $3.0 billion in non-allowed costs on Medicare PPS patients and $2.0 billion on other Medicare patients in 1997, for a total of $5.0 billion (Figure 9). Applying this against the $9.2 billion Medicare surplus referred to above means that well over half of the Medicare surplus was offset by non-allowed costs, leaving $4.2 billion to apply to any other expenses that were not covered by other payments (see the discussion in the next section).

The issue of how to treat Medicare non-allowed costs is a controversial one. On one hand, these costs often are for services that it would commonly be agreed should not be the responsibility of a public program, such as political contributions, or simply are not covered by Medicare, such as elective plastic surgery. On the other hand, some of these non-allowed costs are the result of

---

8 The Lewin results were adjusted so they could be combined with the analysis of hospital inpatient PPS payments and costs described above. This mainly involved benchmarking the two sets of numbers given the data from the AHA's Annual Survey of Hospitals on overall Medicare payments and costs, and accounting for the difference in treatment of Medicare-allowed and total hospital costs, as discussed below. This issue is described in more detail in Guterman (forthcoming).

9 Also, there is evidence that hospitals systematically underreport inpatient costs and overreport other costs (Ashby 1993). This is attributed to the fact that, because acute inpatient services are paid under a PPS and payments for other services are at least partially based on the facility's reported costs, the hospital benefits from allocating as much of its costs as possible to other services. The magnitude of this effect across all hospitals is unclear.

10 This figure is derived from the observation that total Medicare costs were approximately 4.4 percent greater than payments in 1980, when Medicare essentially reimbursed all of hospitals' Medicare-allowed costs. Non-allowed costs (the difference between total and allowed costs) must therefore have been approximately 4.4 percent of allowed costs. This percentage may well have changed over time; the extent to which it has will affect the qualitative--but probably not the qualitative--results described here.
Figure 8. Estimated Medicare Payment Surplus for Hospital Inpatient Acute Care and Deficit for Other Hospital Services, 1997-2002 (Excluding Medicare Non-Allowed Costs)

NOTE: PPS payments and costs estimated using BBA and BBRA payment policies and assuming hospital cost growth at MB-1; other Medicare payments and costs derived from estimates by the Lewin Group and data from the American Hospital Association.
Figure 9. Estimated Medicare Payment Surplus for Hospital Inpatient Acute Care and Deficit for Other Hospital Services, 1997-2002 (Including Medicare Non-Allowed Costs)

NOTE: PPS payments and costs estimated using BBA and BBRA payment policies and assuming hospital cost growth at MB-1; other Medicare payments and costs derived from estimates by the Lewin Group and data from the American Hospital Association.
accounting rules peculiar to Medicare, and are viewed by the hospital as part of their operations and appropriately allocated to Medicare as well as other patients.

These cross-subsidies become more important over time as a result of the BBA. By 2002, the hospital inpatient PPS surplus is projected to fall to $8.8 billion (from $13.9 billion five years earlier), while the amount by which payments for other Medicare services falls short of allowed costs is $5.9 billion (compared to $4.8 billion in 1997). The net Medicare surplus (relative to allowed costs) is therefore $2.9 billion. Medicare non-allowed costs, however, will be an estimated $5.5 billion, for a net Medicare loss (from the hospital's perspective) of $2.6 billion. By 2002, then, Medicare will either continue to provide $2.9 billion in payments over its allowed costs (down from $9.2 billion in 1997), or produce a $2.6 billion payment shortfall, depending on which cost-counting rules are used.

Another way of portraying the impact of the BBA on Medicare payments and costs is to compute the Medicare margin, which compares revenues and costs for all services provided to Medicare patients (including non-allowed costs). In 1997, this measure was at its all-time high of 3.4 percent, corresponding to the $4.2 billion Medicare surplus remaining after non-allowed costs are accounted for (Figure 10). The trend in this measure over the past two decades indicates that the relationship between hospitals' Medicare payments and costs has varied widely from year to year. In the period prior to 1984, this reflected non-allowable costs and payment limits for some services; in 1984 and 1985, the positive margin reflects the first years of the acute inpatient PPS; in the late 1980s, hospital costs were rising rapidly and Medicare payment (intentionally) did not follow that trend; and through the 1990s, hospital costs slowed substantially.

The analysis also indicates that, in the absence of the BBA changes, the Medicare margin would have been expected to balloon to 10.3 percent by 2002; this would have been almost 7 percentage points higher than at any time prior to the BBA. This illustrates that, despite their usefulness as a benchmark for developing budgetary estimates, the baseline assumptions can be extremely misleading as a basis for evaluating policy. If the Medicare margin ever had approached the 10.3 percent level implied by the baseline assumptions, there would have been tremendous pressure to reduce Medicare spending; in the absence of such reductions, it would have been considerably more difficult for hospitals to resist pressures either to allow costs to rise more rapidly or to accept lower payment rates from other payers.

The legislation has reduced the projected Medicare margin in 2002 to -2.1 percent. This figure, although negative, compares favorably with the Medicare margins in the majority of (11 of the 18) years preceding the BBA. Moreover, if the estimate of Medicare non-allowed costs were removed, the Medicare margin would be positive (2.2 percent). Again, the meaning of this number depends on whether one takes the perspective of the hospital or the Medicare program.

**MEDICARE AND OTHER PAYERS**
Figure 10. Estimated Effect of BBA and BBRA on Hospitals' Medicare Margin (Including All Costs Allocated to Medicare)

NOTE: PPS payments and costs estimated using BBA and BBRA payment policies and assuming hospital cost growth at MB-1; other Medicare payments and costs derived from estimates by the Lewin Group and data from the American Hospital Association.
Figure 11. Total Hospital Revenue Margin, 1980-1997

The bottom line in describing hospitals' financial status is the total margin. This measure compares total revenues from patient care and other sources with the total expenses of the institution, including all of the hospital's activities. In 1980 and 1981, when hospitals generally were paid on the basis of costs or charges, the total margin was relatively low (Figure 11). In 1982, the pressure to change the way hospitals were paid was embodied in TEFRA (see the discussion above), but the total margin rose somewhat; this reflects a slight increase in payments from private payers relative to the costs of treating their patients (Medicare Payment Advisory Commission 1998b). With the beginning of prospective payment, and the initially high PPS margins, the total margin jumped, but then it fell again as PPS payment rates were limited and rapid hospital cost growth was not quite offset by the ability to elicit ever larger payments from private payers. Between 1983--when the acute inpatient PPS was enacted--and 1994, the total margin ranged (except for one anomalous year in 1989) from 3.3 percent to 4.8 percent.

In the years immediately preceding the BBA, however, the total margin jumped. The 1995 total margin of 5.7 percent was almost a percentage point higher than at any time in history, and the 1996 and 1997 margins of 6.7 percent were a full percentage point higher than that. As with the Medicare margin, the major factor in this increase was decelerating costs; whereas costs per case increased at an 8.6 percent annual rate between 1986 and 1992, they slowed to 1.6 percent per year between 1992 and 1997 (Figure 12).11

The change in cost growth reflected a change in the pattern of hospital payments. Between 1986 and 1992, hospitals were able to support their rapid cost growth with even more rapid payment increases from private payers. The ratio of payments from private payers to the costs of treating their patients rose from 116 percent in 1986 to 131 percent in 1992; while costs per case grew at 8.6 percent over this period, payments per case from private payers grew at 10.9 percent.12 As discussed above, Medicare payments did not keep up with the rapid rise in costs, but payments for other patients (primarily Medicaid and the uninsured) did--mostly reflecting the jump in Medicaid disproportionate share hospital payments, which went from less than $1 billion in 1989 to more than $17 billion in 1992 (Bradley, Fisher, and Harris 1994).

In the period between 1992 and 1997, hospitals were experiencing considerable pressure from private payers: payments per case for these patients actually fell by 0.7 percent per year, compared with the 10.9 percent annual increase they provided in the previous period. This sharp change appears to reflect the growth of managed care and the generally more competitive climate among private insurers. In response to this pressure, hospitals held their cost growth to 1.6

---

11 The measure of hospital cost growth used here is total expenses per adjusted admission, from the AHA’s Annual Survey of Hospitals. This measure compares the increase in total expenses for all community hospitals with the increase in workload, as represented by a weighted average of inpatient admissions and outpatient visits.

12 This figure is derived from the payment to cost ratios presented by the Medicare Payment Advisory Commission (1998b) and costs per adjusted admission from the AHA Annual Survey of Hospitals; if the changes in both the payment to cost ratio and costs per case are known, then the changes in payments per case can be derived.
Figure 12. Change in Costs per Case and Hospital Revenue Flows from Private, Medicare, and Other Patients, 1986-2002

percent per year--down from 8.6 percent in the previous period. This was not enough to keep up with the downward trend in private payers' payments, and the payment to cost ratio for those payers fell from 131 percent in 1992 to 118 percent in 1997. But the growth in Medicare payments--although it was slower than in the previous period (4.7 percent per year, compared with the previous 6.3 percent)--exceeded the increase in costs, and this was more than enough to offset the decline in private payments. Payments for other patients (again, primarily Medicaid and the uninsured) stayed about even with cost growth, and the total margin increased by more than 2 percentage points.

Under the assumptions of this analysis, costs would increase at a 2.0 percent annual rate between 1997 and 2002. The analysis also indicates that Medicare payments per case will increase at 0.9 percent per year during the period. This represents a decline of 3.8 percentage points from the previous period in the annual growth of Medicare payments per case; moreover, whereas Medicare payments grew 3.1 percentage points faster than costs between 1992 and 1997, they are expected to grow 1.1 percentage points slower than costs in the five years after the BBA. This difference indicates why hospitals are worried about the Medicare cuts: the program will continue to cover its allowed costs, but it will not provide the cushion against continued pressure from private payers that it did in the years prior to the BBA.

Another way of looking at this situation is to compare explicitly the pattern of cross-subsidies across sources of revenue over time (Figure 13). In 1992, hospitals received payments from private payers that exceeded their costs by $29.0 billion. This more than offset the $26.0 billion by which payments for Medicare and other patient care fell short of costs. Combined with $8.8 billion in net revenues from other sources (including philanthropy, revenues from assets, etc.), hospitals realized $11.8 billion in total net revenues, for a total margin of 4.6 percent.

In 1997, despite considerably slower cost growth, the surplus from private payers had fallen to $20.3 billion--still substantial, to be sure, but a drop of $8.7 billion from five years before. Medicare, however, had gone from a $10.8 billion shortfall to a $4.2 billion surplus. Therefore, although the private payer surplus still was much greater, the $15.0 billion improvement in Medicare net revenue was crucial in offsetting the falling private payer surplus. The loss on other patients was $3.0 billion greater than in 1992, but net revenues from other sources jumped from $8.8 billion to $15.5 billion, presumably reflecting the performance of the stock market. As a result, despite the decline in net revenue from private payers and worsening losses on poor and uninsured patients, hospitals had net revenues of $21.8 billion in 1997--an increase of $10.0 billion from five years before--for a 6.7 percent total margin.

How hospitals perform in 2002 will depend to a great extent on whether the private payers continue to exert increasing pressure on payments. The BBA analysis indicates that Medicare net

13 The Medicare number includes non-allowed costs, and the losses from other patients include primarily Medicaid payment shortfalls (which also reflect Medicaid non-allowed costs) and losses on uncompensated care costs.
Figure 13. Contribution to Total Hospital Margin, By Revenue Category, 1992, 1997, and 2002

NOTE: In Scenario 1, payments from all sources but Medicare are assumed to rise at the same rate as costs (MB-1) from 1997 to 2002. In Scenario 2, payments from private payers are assumed to remain fixed at their 1997 level.
revenue will fall by $6.8 billion in 2002 compared to 1997. Although this still would leave hospitals in better position vis-a-vis Medicare than they were in 1992, they are facing other pressures as well: Medicaid payment rates are not expected to increase--in fact, disproportionate share hospital payments are being reduced--and the proportion of the population that is uninsured is increasing, despite the sustained economic growth of the past several years. A deterioration in general economic conditions may not only increase hospitals' losses on Medicaid and the uninsured, it also would threaten the continued flow of revenues available from other sources.

If revenues from sources other than Medicare just keep up with cost growth (Scenario 1 in Figure 13)--that is, if they increase at 2.0 percent per year--then hospitals will maintain a level of financial performance comparable to that in the early 1990s; this analysis would project net revenues of $16.5 billion and a total margin of 4.7 percent. If, on the other hand, payments from private payers are kept at their 1997 levels (Scenario 2 in Figure 13), with no increase for inflation, the analysis projects that the private payer surplus will fall to $8.2 billion--still larger than any other payer group, but so great a reduction from previous levels that hospitals' overall net revenues would fall to $2.2 billion and the total margin to 0.7 percent--lower by far than at any time in the past two decades.14

IMPLICATIONS

The health care financing system historically has been characterized by cross-subsidies among its components and missions. Even in the early 1980s, private payers paid hospitals more than the costs of their patients, presumably to offset payment shortfalls from Medicare and Medicaid and losses on patients who did not pay for care, as well as to underwrite other social and academic missions that hospitals might undertake despite the lack of explicit revenue sources to support them. The pattern and magnitude of these cross-subsidies has changed over time, as both the missions and the willingness and ability of different payers to provide them has shifted.

Medicare, in fact, traditionally has provided implicit subsidies to promote a number of objectives. Since it began, it has paid a portion of hospitals' direct costs of graduate medical education programs, both for training physicians and nursing and allied health personnel. It also has recognized the higher costs of patient care at teaching hospitals, first by allowing those hospitals to include those costs in the amount to be reimbursed by the program and later through a generous adjustment to PPS payments. These additional payments are not earmarked for teaching; they can be used for any purpose, and presumably they help to finance the wide range of other missions that are commonly associated with teaching hospitals, such as basic and clinical research and the development and application of sophisticated technologies, medicines, and treatment regimes. In addition, Medicare adjusts its payment rates for hospitals that treat a

14 The data for 1998 indicate that pressure from private payers continued, with payments per case falling by 0.9 percent while costs per case rose by 2.6 percent (Medicare Payment Advisory Commission 2000 and American Hospital Association 2000). The total margin for all hospitals fell to 5.7 percent--a full percentage point less than in 1997.
disproportionate share of indigent patients, supporting access not only for poor Medicare patients but also for other patients who use those facilities. Other provisions in the Medicare payment rules offer special treatment for rural hospitals—particularly small ones and those that are the sole source of acute inpatient care in their communities. All of these policies are consistent with Medicare's role not only as a prominent purchaser of health care but also as an important social program.

As indicated by the data presented in this paper, private payers also have provided support for many of these objectives. In fact, the payment surpluses provided by private payers have been—and continue to be—much greater than from any other source. This support, however, has tended to be implicit, which creates three problems. First, it is much more difficult to target implicit than explicit subsidies. Second, because those subsidies are tied to payments for patient care, their distribution is highly dependent on where the patients go; in the case of private payers, the hospitals that pursue the missions that society might most want or need to support tend to have very low shares of their patients, making it difficult to use this mechanism effectively without drastically distorting patient care prices. Third, implicit subsidies are more subject to being squeezed out when competition becomes intense; the sharp drop in the private payer surplus over the past several years corroborates this concern.

The problems pertaining to explicit versus implicit subsidies also apply to Medicare, although perhaps to a somewhat lesser extent because public policy makers have more tools available with which to target payments than do private entities that have to compete in a market. However, as pressure builds to make Medicare a more competitive payer, its ability to pursue its own social missions may deteriorate. This trend was evident in the BBA: Medicare payments were tightened in response to a desire to balance the federal budget, an imperative to avoid the imminent insolvency of the HI Trust Fund, and a perception that Medicare was paying too much for hospital inpatient and other services. These objectives generally were accomplished: the federal budget now is running the largest surpluses in history, the insolvency of the Trust Fund has been pushed back until 2025, and Medicare has reduced but not entirely eliminated the surplus that it was providing hospitals—at least relative to its own allowed costs. But a number of problems remain, and perhaps have been exacerbated by the BBA.

Medicare continues to pay hospitals much more than their costs for acute inpatient care, and it underpays for many other services; this produces distorted incentives as to how and where to treat patients, and does not lead to the efficient provision of services in any of the affected settings. One response has been to recommend more payment across-the-board for inpatient services, which already are well-paid. However, this could increase the distortion in payments across services, and might also fail to address the problems faced by the providers hardest hit by the BBA. The reduction in the Medicare payment surplus has come disproportionately at the expense of the best-paid hospitals—teaching hospitals and hospitals that treat a disproportionate share of indigent patients (many of which are the same institutions)—these also are the hospitals that pursue the very missions that Medicare traditionally has valued. The BBA's payment
changes have brought payments more closely in line with costs, but they also have reduced the subsidies that reflect Medicare's role as a social program.

Complicating this situation is the implementation of numerous new payment systems in a short period of time. In its first 25 years, Medicare put one prospective payment system into place—the acute care hospital inpatient PPS, in 1983. Through the end of its thirty-second year, it had implemented the physician fee schedule as well. In the five years beginning with the SNF PPS in July 1998, however, a total of seven prospective payment systems (in addition to SNFs, new systems for hospital outpatient departments, home health agencies, rehabilitation facilities, long-term care hospitals, psychiatric facilities, and ambulatory surgical centers) are scheduled to be implemented. For many of these services, years of research have been devoted to analyzing alternative options for payment. But the health care sector never has had to adjust to so many changes at once. Moreover, many of the services provided in these facilities overlap, and most of them either overlap or are consequent to the services provided by hospitals. It is difficult to anticipate how all of the incentives that these new systems will affect the behavior of each type of provider and how they will affect each other, and it will be even more difficult to sort out the policy implications of the responses we observe.

At the end of the third post-BBA year, hospitals face increasing financial pressure on multiple fronts and the need to respond to numerous changes in how they and the other providers with whom they interact are paid. Medicare hospital payments certainly are lower than they would have been, but they still cover the costs allowed by the program. They no longer, however, provide as much of a subsidy for some of the missions that Medicare traditionally has supported, and they no longer provide a cushion against increased pressure from private payers. Unlike the mid- and late 1980s, hospitals cannot use sharp increases in private payments to offset constrained Medicare payments and underwrite rapid cost increases; unlike the early and mid-1990s, they cannot look to steadily increasing Medicare payments and the ability to significantly reduce cost growth to offset the deterioration of their private payer surplus. What's more, these pressures are coming in the context of a complicated world that promises to become dramatically more so over time. And some types of facilities—frequently the ones that have provided the most socially desirable services to the populations that need them most—may be more vulnerable to these changes than others.

These circumstances call for a reexamination not only of how health care is paid for but also of the use of these payments in underwriting other activities that society values. The inherent conflict between being a prudent payer and supporting broader missions has led to inefficiencies and overspending as Medicare and private payers tried to accomplish both at once. But the focus on one of these objectives to the exclusion of the other presents even greater risks. As market forces squeeze excess payments out of the health care sector, the additional services that used to

---

15 The composite rate for renal dialysis, which pays a fixed amount for most routine dialysis services, also was established in 1983, but it affects only a small percentage of Medicare providers and beneficiaries.
be supported by these excess payments are imperiled. Simply restoring some of the Medicare payment reductions partially alleviates the pressure, but it doesn't guarantee that the desired services will continue to be provided, as private payers continue to demand lower prices in the face of deteriorating finances and costs begin to accelerate. Another approach must be found to make sure that the services that society values are available as the implicit subsidies that were used to finance them evaporate.
REFERENCES


