

A P P E N D I X

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**Financial performance of rural  
hospitals and the value of  
special payment policies**

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# Financial performance of rural hospitals and the value of special payment policies

This section provides a detailed analysis of hospital financial performance to accompany the discussion of Medicare inpatient payment policy in Chapter 4. These analyses compare the performance of rural hospitals—including distinct groups of rural hospitals created by Medicare payment policy as well as by degree of ruralness—with that of urban ones.<sup>1</sup> In general, rural hospitals have lower Medicare margins but higher total margins than their urban counterparts. This appendix begins with an analysis of financial performance under Medicare and then expands to trends in other sources of patient revenue (private payers and Medicaid, as well as uncompensated care) and finally to total margins (reflecting all payers and non-patient care revenue).

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## Financial performance under Medicare

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Medicare is the largest purchaser of health services from hospitals, and Medicare plays a larger role in rural areas than in urban areas. This makes financial

performance under Medicare relatively more important for rural hospitals. In this section, we examine the trend in inpatient margins, the impact of special payment provisions for certain rural hospitals compared with other special payments Medicare makes primarily to urban hospitals, and the overall Medicare margin, which includes hospitals' five largest lines of Medicare business.

### Medicare inpatient margin

In the early 1990s, the Medicare inpatient margin was negative for both urban and rural hospitals, but the difference between the two groups was slight.<sup>2</sup> Through the 1990s, urban hospitals had higher inpatient margins than rural hospitals, and the gap has widened in recent years (Figure C-1). In 1999, the urban margin fell to 13.5 percent after reaching an all-time high of 18 percent in 1997, while the margin for rural hospitals dropped to 4.1 percent after peaking at 10 percent in 1996.

The Medicare inpatient margin is lower for rural hospitals than urban hospitals due to lower payments and relatively higher

cost growth. Differences in payment levels have been relatively constant over time because most indirect medical education (IME) and disproportionate share (DSH) payments go to urban hospitals and contribute substantially to their higher margins.<sup>3</sup> Accompanying this, rural hospitals have had higher cost increases throughout the 1990s. Between 1990 and 1999, rural hospitals' cost increases have consistently been 1 to 2 percentage points higher than those of urban hospitals, and the cumulative change in cost per case was nearly 30 percent for rural hospitals and just 14 percent for urban hospitals (Figure C-2). This has caused the gap in the inpatient margin to grow steadily, to nearly 10 percentage points in 1999. This suggests that the difference in inpatient margins between rural and urban hospitals is due more to higher rates of cost growth for rural hospitals than inherent differences in payment policy.

Although cost growth slowed for all hospitals in the mid-1990s, it has begun to increase in recent years. The effect of differences in cost growth was most

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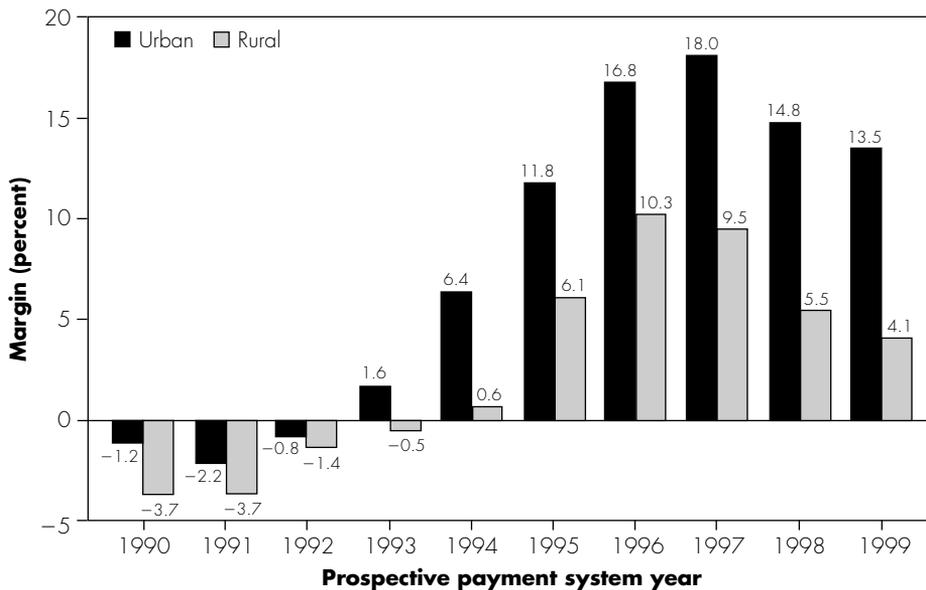
1 For an overview of the special payment policies for rural hospitals, see Appendix B and the text box in Chapter 4.

2 The inpatient margin is calculated (in percentage terms) as the difference between inpatient payments and Medicare-allowable costs (as derived from costs reported by hospitals to the Health Care Financing Administration) divided by inpatient payments. The same general approach is used for the overall Medicare margin and the total margin.

3 The impact of both IME and DSH payments on total prospective payment system payments to urban and rural hospitals is estimated in the section on the value of Medicare's special payment provisions.

**FIGURE C-1**

**Medicare inpatient hospital margin, by urban and rural location, 1990-1999**



Note: Data for 1999 are preliminary, based on two-thirds of all hospitals covered by prospective payment. Margins for all years are based on Medicare-allowable costs.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

striking in 1997, when rural hospital inpatient margins fell while those of urban hospitals continued to increase. In 1999, rural hospital costs increased 3.7 percent and urban hospital costs 2.6 percent, the highest rate since 1993 for either group.

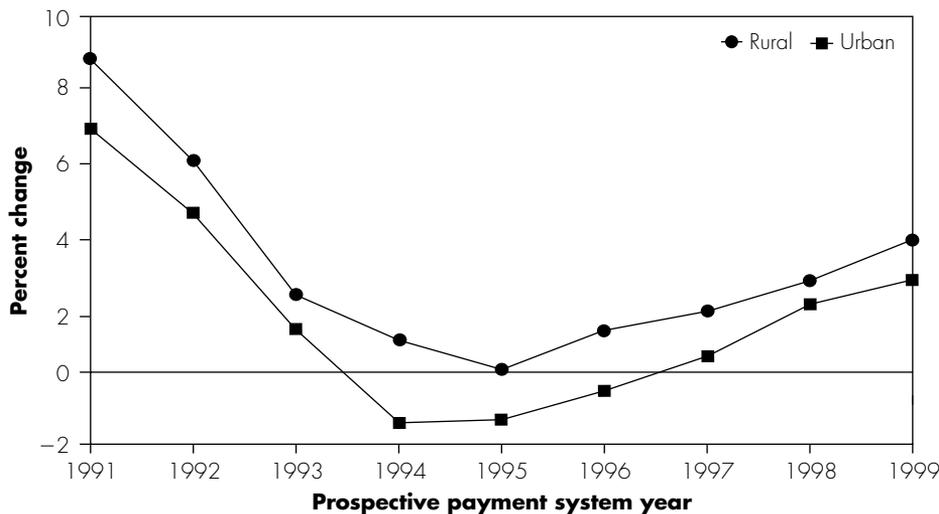
Much of rural hospitals' higher growth in costs per case appears to have been caused by smaller reductions in length of stay. Through the 1990s, urban hospitals' length of stay declined 32 percent, compared with 24 percent for rural facilities. The larger drop for urban hospitals is perhaps due to better access to providers of post-acute and follow-up ambulatory care in their service areas. After considerably larger reductions for urban hospitals in each year from 1993 to 1996, the decline in length of stay has slowed in recent years for both urban and rural hospitals, to less than 2 percent for both groups in 1999 (Figure C-3).

The trend in unit costs is closely related to the trend in volume of services. Overall, admissions to community hospitals have grown by 3.9 percent over the last decade.<sup>4</sup> Although this rate of increase has not kept pace with population growth, the industry as a whole has improved its ability to realize efficiency gains related to scale of operation. But the cumulative increase has been only 2.6 percent for rural hospitals, compared with 4.1 percent for urban facilities, which suggests that rural hospitals' problems of scale have worsened relative to their urban counterparts.

Rural hospitals that receive special payments under Medicare—rural referral centers (RRCs), sole community hospitals (SCHs), and small rural Medicare-dependent hospitals (MDHs)—have higher inpatient margins than other rural hospitals (Table C-1). At 7.7 percent, the margin for MDHs is more than four times that of rural hospitals with more than 50 beds that have not qualified for any of Medicare's special payment provisions.

**FIGURE C-2**

**Percent change in cost per case, urban and rural hospitals, 1991-1999**



Note: Data for 1999 are preliminary, based on two-thirds of all hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

4 This analysis was based on data from the American Hospital Association's Annual Survey of Hospitals, with hospitals segregated according to the urban/rural designation of their county in 1999.

Hospitals located in the most isolated rural areas have the highest inpatient margins of all rural hospitals, and fewer had negative margins (Table C-2). Other rural hospitals in areas adjacent to urban areas, or not adjacent but containing a town, have lower margins and a greater share have negative margins than either urban hospitals or the most isolated rural hospitals. That the most rural hospitals have a Medicare inpatient margin exceeding 8 percent suggests that the existing special payment policies that seek to target isolated hospitals have indeed had a positive effect—on average—for these hospitals.

### Value of Medicare's special payment provisions

Over the years, the Congress has responded to perceived problems of rural hospitals by enacting a number of policies that provide special payments to certain rural facilities. We have measured the payment value of these provisions and their proportional impact on Medicare inpatient payments for the hospitals that qualify.<sup>5</sup> This analysis provides insight into the number of facilities that benefit from special payments, shows which benefits the facilities receive, and also provides a sense of scale by analyzing other policies that tend to benefit urban hospitals over their rural counterparts.

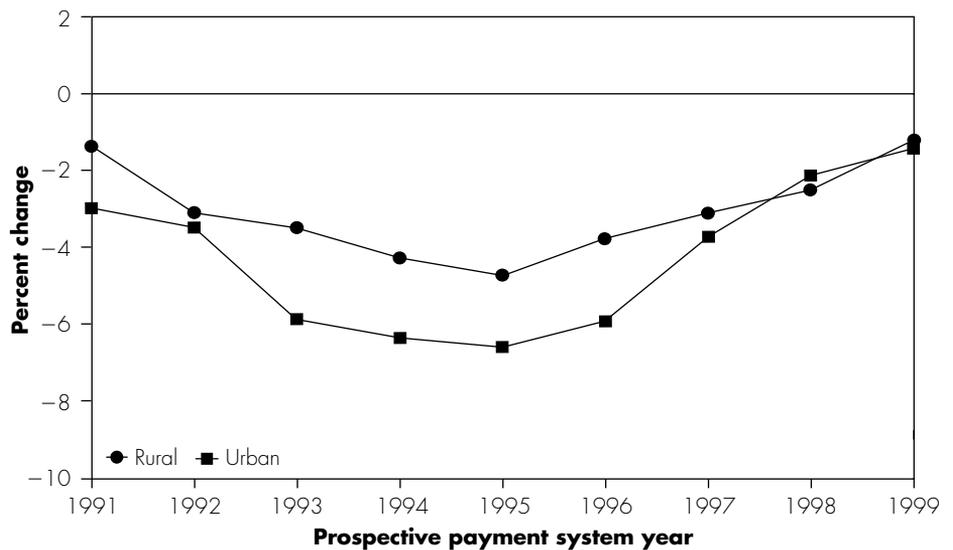
We analyzed the following payment policies:

- sole community hospitals
- small rural Medicare-dependent hospitals
- rural referral centers
- critical access hospitals
- disproportionate share payments
- geographic reclassification
- indirect medical education payments in excess of the cost impact of teaching

Table C-3 shows the number of hospitals in each special payment group (a hospital can be in more than one of these groups). Although the first four policies are

**FIGURE C-3**

**Percent change in length of stay, urban and rural hospitals, 1991–1999**



Note: Data for 1999 are preliminary, based on two-thirds of all hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

technically restricted to rural hospitals, all except the Medicare-dependent program allow a hospital to keep its group designation—and the resulting additional payment—if its county becomes urban. All hospitals may qualify for DSH and IME payments and geographic reclassification, but substantially more urban hospitals receive DSH and IME payments, while more rural hospitals are reclassified.

Not all rural hospitals in a special payment group receive the special payments for which they are eligible, for instance because prospective payment system (PPS) payments are higher, or they do not meet the DSH eligibility threshold. Table C-4 shows the number of hospitals in each group that receive special payments, the type of special payment received, and the resulting increase in PPS payments.

**TABLE C-1**

**Inpatient Medicare, overall Medicare, and total margins, by rural hospital groups, 1999**

Hospital group	Medicare inpatient margin	Overall Medicare margin	Total margin
Rural referral centers	4.5	-1.3	7.4
Sole community hospitals	4.9	-2.7	3.0
Medicare-dependent hospitals	7.7	-1.3	2.5
Other rural < 50 beds	3.1	-5.6	1.5
Other rural ≥ 50 beds	1.7	-5.0	3.8

Note: Inpatient and overall Medicare data are based on Medicare-allowable costs. Data are preliminary; the inpatient and total (all sources of revenue) margins are based on a sample of about two-thirds of hospitals covered by prospective payment, while the overall Medicare margin is based on about one-half of hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

<sup>5</sup> The value of special payments was estimated for hospital cost reporting periods beginning in fiscal year 2000.

**TABLE  
C-2**

**Hospital Medicare inpatient margin and percent of hospitals with negative margin, by hospital location, 1999**

Hospital location (UIC)	Medicare inpatient margin	Percent with negative margin
Urban, in an MSA (1,2)	13.5%	26.1%
Rural		
Adjacent to an MSA and includes a town with at least 10,000 people (3,5)	3.1	42.5
Adjacent to an MSA but does not include a town with at least 10,000 people (4,6)	6.0	43.3
Not adjacent to an MSA but includes a town with at least 2,500 people (7,8)	4.5	43.5
Not adjacent to an MSA and does not include a town with at least 2,500 people (9)	8.4	36.0

Note: UIC (urban influence code, as defined by the U.S. Department of Agriculture). MSA (metropolitan statistical area, as defined by the U.S. Office of Management and Budget). Data are based on Medicare-allowable costs. Data are preliminary, based on two-thirds of hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

SCHs are eligible for the higher of costs in a specific base year trended forward or PPS payments with potentially higher DSH payments. About half of SCHs qualify for payments based on base-year costs, and about one-quarter receive extra

DSH payments. SCH payments linked to base-year costs represent the largest single benefit to rural hospitals. In 2000, the extra payments due to this benefit totaled \$248 million, which raised the payments of qualifying hospitals by 8.1 percent

relative to what they would have received under the PPS.<sup>6</sup> As of 2001, these hospitals have the additional prospect of receiving 1996 base year costs trended forward, in addition to the 1982 and 1987 base-year options previously available. We estimate that an additional 43 hospitals will benefit from this option, increasing total SCH cost-based outlays by \$54 million.

In comparison, in 2000 approximately 40 percent of Medicare-dependent hospitals qualified for base-year costs trended forward, which raised their payments by \$31 million, or 4.3 percent.

The chief benefit enjoyed by RRCs was easier reclassification. In 2000, approximately 80 percent of RRCs were reclassified, which increases their PPS payments by \$217 million, or 7.2 percent. Less than a third of RRCs received additional DSH payments of \$30 million, which increased their PPS payments by 0.7 percent.

Cost-based reimbursement for critical access hospitals (that is, the amount of payment above what the PPS would otherwise provide) resulted in a relatively modest increase in Medicare outlays compared with other special payment policies—\$18 million in fiscal year 2000, which raised their payments by 10 percent. However, as of April 2001, 375 hospitals have received approval for CAH status, compared with the 216 used in this analysis, and this increase—as well as additional payments for cost-reimbursed outpatient services—will raise the payment estimate substantially.

Payment policies that provide additional payments to both urban and rural hospitals—geographic reclassification, DSH payments, and IME payments in excess of the estimated costs associated with operating an approved residency program—have a much greater impact in terms of increased payments than do rural hospital policies (Table C-5).

**TABLE  
C-3**

**Hospitals in special payment policy groups, by urban and rural location, 2000**

Policy	Rural hospitals	Urban hospitals	All hospitals
All hospitals	2,128	2,722	4,850
Sole community hospitals	597	43	640
Rural referral centers	169	6	175
Sole community and rural referral	56	1	57
Small rural Medicare-dependent hospitals	299	0	299
Critical access hospitals	216	3	219
Geographic reclassification	408	83	491
Disproportionate share	339	1,440	1,779
Indirect medical education	69	1,038	1,107

Note: The number of sole community hospitals has grown to 833 and the number of critical access hospitals to 375 as of April 2001. The changes in qualifying criteria for disproportionate share payments enacted by the Medicare, Medicaid and SCHIP Benefits Improvement and Protection Act of 2000 are expected to make 840 additional rural hospitals eligible for this payment adjustment.

Source: MedPAC analysis of data from HCFA.

<sup>6</sup> Health Care Financing Administration staff report that the number of SCHs has risen by 75 since the count used for this analysis was developed, which means that the total payments to these hospitals will also increase.

Geographic reclassification is the only one of these policies that tends to benefit rural hospitals more than urban hospitals. In 2000, 408 rural hospitals were reclassified, which increased their payments by \$299 million (a 7 percent increase in PPS payments). Only 83 urban hospitals were reclassified, increasing their payments by \$124 million, or 5.1 percent of PPS payments. Of the reclassified rural hospitals, approximately one-third were RRCs, and more than half of the total increase in payments from reclassification went to these facilities.

Because reclassification is implemented in a budget-neutral fashion through reductions in the PPS base payments, all hospitals—even those that are reclassified—pay to some extent. The losses due to reclassification are skewed toward urban hospitals. Among hospitals not reclassified, payments to urban hospitals were reduced by \$400 million and payments to rural hospitals were reduced by \$23 million. In percentage terms, these reductions in total PPS payments were fairly close for non-reclassified urban and rural hospitals, at -0.6 and -0.4 percent, respectively.

Although rural hospitals are eligible to receive DSH and IME payments under Medicare, most of these payments go to urban hospitals. This has contributed to an inpatient margin for urban hospitals that is consistently higher than that of their rural counterparts. More than half of all urban hospitals qualified for DSH payments in 2000, compared with less than 20 percent of rural hospitals. This difference existed in part because the eligibility standard was higher for rural hospitals. The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) equalized this standard, which we estimate will allow 840 additional rural hospitals—about 40 percent of the total—to receive DSH payments. Urban hospitals collected more than \$4.7 billion in DSH payments in 2000, increasing their PPS payments by 11.5 percent. In contrast, rural hospitals collected \$78 million, which increased their payments by 2.7 percent.

**TABLE C-4**

**Rural special payment groups: number receiving additional payments and value of payments, 2000**

Hospital group	Number of hospitals	Increase in payments	
		Amount (millions)	Percent
<b>Sole community hospitals</b>			
Base year costs trended forward	337	\$248	8.1%
Favorable DSH formula	151	43	1.3
<b>Rural referral centers</b>			
Reclassification	179	217	7.2
Favorable DSH formula	52	30	0.7
<b>Medicare dependent hospitals</b>	129	31	4.3
<b>Critical access hospitals</b>	219	18	10.0

Note: DSH (disproportionate share hospital). Hospitals that are both sole community hospitals and rural referral centers are included in the group for which they received payment. Twenty-seven of 56 SCH/RRC hospitals received base-year costs trended forward. DSH payments exceed what a hospital would have received without preferential treatment.

Source: MedPAC analysis of data from HCFA.

**TABLE C-5**

**Value of payment policies that affect both urban and rural hospitals: geographic reclassification, disproportionate share, and indirect medical education payments, 2000**

Hospital group	Number of hospitals	Change in payments	
		Amount (millions)	Percent
<b>Reclassified hospitals</b>			
Urban	83	\$124	5.1%
Rural	408	299	7.0
<b>Non-reclassified hospitals</b>			
Urban	2,639	-396	-0.6
Rural	1,720	-23	-0.4
<b>Disproportionate share</b>			
Urban	1,431	4,711	11.5
Rural	339	78	2.7
<b>Indirect medical education</b>			
Urban	1,038	2,313	5.5
Rural	69	34	2.8

Note: Change in payments refers to the difference between what hospitals would receive under prospective payment and what they would receive without the special payment policy. Indirect medical education payments are measured as the amount of payment in excess of MedPAC's estimate of the costs associated with operating an approved residency program. The total disproportionate share payments shown are net of all special disproportionate share payments to special rural groups, which came to roughly \$81 million.

Source: MedPAC analysis of data from HCFA.

The next largest source of special payments to urban hospitals is IME payments to teaching hospitals, measured as the level of payments above our estimate of the cost impact of teaching for hospitals with residents. The IME adjustment in 2000 was 6.5 percent for every 10 percent increment in the resident-to-bed ratio, but we estimate the empirical costs of teaching to be about 3.2 percent. The excess payments this difference creates are heavily skewed toward urban hospitals. In 2000, more than 1,000 urban hospitals shared \$2.3 billion in IME payments above the costs of teaching, compared with 69 rural hospitals that received just \$34 million. This excess increased urban hospital payments by 5.5 percent, compared with 2.8 percent for rural facilities.

The percentage increase in total payments resulting from these special payment provisions is fairly close for urban and rural hospitals, despite the disparity in terms of actual dollar outlays (Table C-6). Urban hospitals received almost \$7.2 billion in special payments, which increased their payments 11.4 percent. Rural hospitals received about \$800 million, which increased their payments 8.3 percent. The lower standard to qualify for DSH payments granted under the BIPA for all rural hospitals, as well as urban hospitals with fewer than 100 beds, will increase total rural payments by 1.4 percent and urban payments by 0.1 percent. This will bring the total impact of special payment provisions to 9.7 percent for rural hospitals, a level nearly comparable to the urban hospital level of 11.5 percent.

### Overall Medicare margin

The overall Medicare margin encompasses the five largest lines of hospital service to Medicare beneficiaries—inpatient, outpatient, home health, skilled nursing, and psychiatric and rehabilitation units. This margin also includes payments and costs for graduate medical education and Medicare bad debt.

The overall Medicare margin plays an important role in our research concerning rural hospitals. When implementation is complete and data are available, this margin will be especially useful in illustrating the performance of rural hospitals under the new PPSs for outpatient departments, home health agencies, and skilled nursing facility units. The appropriateness of the outpatient and home health PPSs for rural hospitals was of particular concern to the Congress in the BBRA.

The overall Medicare margin reflects the relative payment and cost shares of each component of services provided to Medicare beneficiaries. In 1999, hospitals' inpatient margins were sufficiently high and the share of payments accounted for by inpatient services large enough (almost 75 percent) that even though Medicare margins for all other services were negative, the overall Medicare margin was 5.6 percent.

Rural hospitals have had lower overall Medicare margins than urban hospitals and the gap has widened in each of the years for which we have data. In 1998, when some BBA payment policies went into effect, the rural hospital overall Medicare margin fell 6 percentage points, to -2.1 percent (Figure C-4). In 1999, the overall Medicare margin fell again for both urban and rural hospitals, and the disparity between urban and rural hospitals increased to nearly 10 percentage points—the same gap found in the inpatient margin.

The considerably lower overall Medicare margin for rural hospitals reflects a variety of factors. Rural hospitals tend to provide relatively more outpatient and post-acute care, and relatively less inpatient care. About 66 percent of rural hospitals' Medicare costs are accounted for by inpatient services, compared with 73 percent for urban hospitals. Therefore, low Medicare payments (relative to costs) for outpatient services are not as easily compensated by inpatient payments. The

**TABLE  
C-6**

### Value of special payment provisions for urban and rural hospitals, 2000

	Additional payments	
	Amount (millions)	Percent
<b>Under previous policy</b>		
Urban hospitals	\$7,188	11.4%
Rural hospitals	783	8.3
<b>With legislated increase in disproportionate share payments under the BIPA</b>		
Urban hospitals		11.5
Rural hospitals		9.7

Note: Additional payments refer to the difference between what hospitals received under prospective payment and what they would have received without special payment provisions. The Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA) lowered the disproportionate share (DSH) eligibility threshold and raised the DSH adjustment rate for rural hospitals and urban hospitals with fewer than 100 beds.

Source: MedPAC analysis of data from HCFA.

lower margin associated with Medicare outpatient services, however, is partly a vestige of hospital accounting practices. Until recently, hospitals were paid for outpatient services on a cost basis, which created a strong incentive for providers to disproportionately allocate overhead and ancillary costs to outpatient services.<sup>7</sup>

The overall Medicare margin of every rural hospital group—regardless of special payment status—fell below zero in 1998 and declined again in 1999. However, hospitals in special payment groups have fared much better than other rural hospitals (Table C-1). In 1999, overall Medicare margins were -1.3 percent for RRCs and Medicare-dependent hospitals, -2.7 percent for SCHs, -5.0 percent for other rural hospitals with 50 or more beds, and -5.6 percent for other rural hospitals with less than 50 beds.

<sup>7</sup> A 1993 Prospective Payment Assessment Commission study found that outpatient costs were overstated by at least 8 percent.

## Financial performance for all sources of revenue

The total margin is a comprehensive measure of hospital financial performance, encompassing payments and costs from all payers, non-patient services, and non-operating revenue. The total margin for the hospital industry as a whole fell substantially in the late 1990s, reflecting slower growth in Medicare payments, continued pressure from managed care organizations and other private payers, losses from alternate lines of service (and divestiture of these ventures), and a return in 1998 and 1999 to cost increases after an era of very low or negative cost growth. These factors affected rural hospitals to a lesser degree, however, and their total margins have not declined as much as those of urban hospitals.

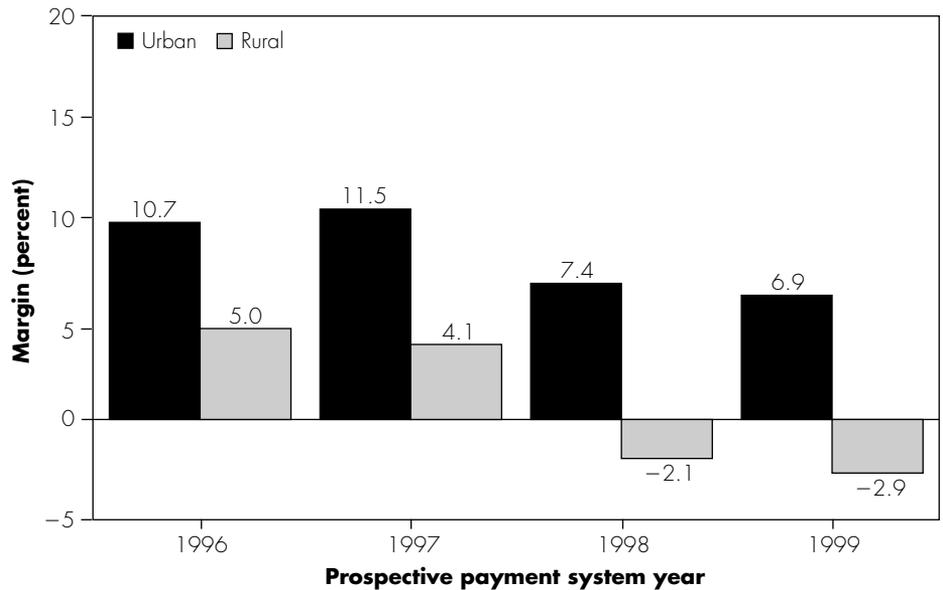
Urban hospitals in recent years have tended to fare slightly better on Medicaid payments than rural hospitals, probably because of a slower rate of cost growth. The ratio of Medicaid payments to costs for urban hospitals grew relative to the ratio for rural hospitals in 1998, but Medicaid payments remained below costs (Figure C-5).

While Medicare and Medicaid margins have been lower for rural hospitals relative to urban hospitals, the private-payer margin for rural hospitals has been consistently higher throughout the 1990s. Payments relative to costs from private payers have fallen for urban hospitals, while payments to rural hospitals have remained above 134 percent of costs, despite rural hospitals' higher cost growth in recent years (Figure C-5). Higher private-sector payments in rural areas reflect the lack of hospital competition and low levels of managed care penetration in rural areas.

Rural hospitals are more dependent than urban hospitals on Medicare and have less private-sector business; therefore,

**FIGURE C-4**

**Overall Medicare margin including graduate medical education, urban and rural hospitals, 1996-1999**

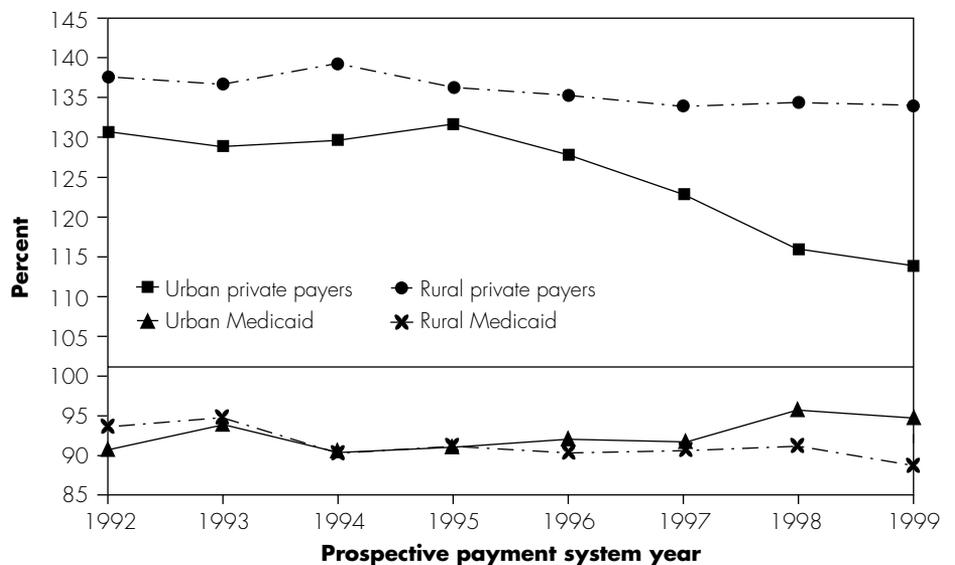


Note: Data for 1999 are preliminary, based on 50 percent of all hospitals covered by prospective payment. Margins for all years are based on Medicare-allowable costs.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

**FIGURE C-5**

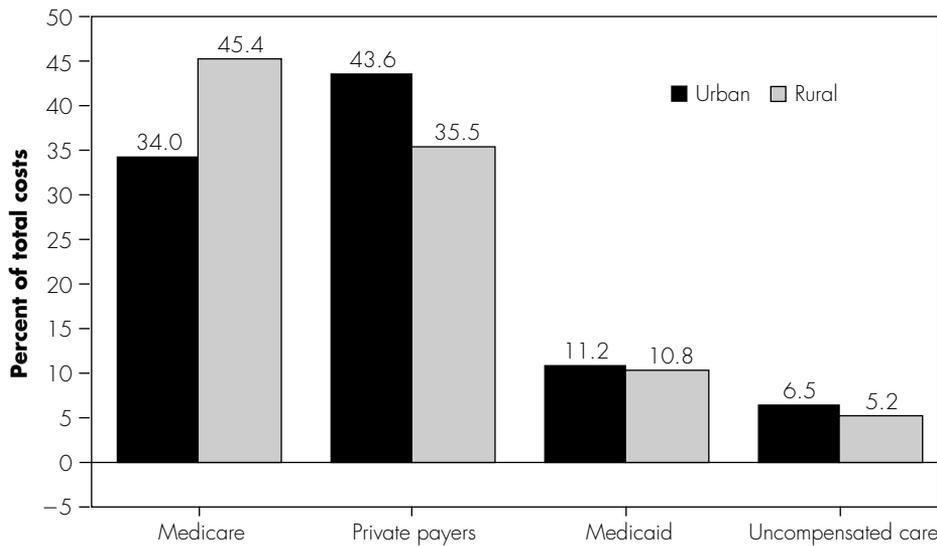
**Private payer and Medicaid payment-to-cost ratios, urban and rural hospitals, 1992-1999**



Source: MedPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

**FIGURE C-6**

**Medicare, Medicaid, and private-payer cost share, urban and rural hospitals, 1999**



Source: MedPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

although rural hospitals have much higher private-payer payment-to-cost ratios, they have less private-payer revenue (Figure C-6). Despite the smaller share of private payer business, however, private-sector payments on average were still high enough to produce consistently higher total margins for rural hospitals. This outcome was aided by rural hospitals' modestly lower uncompensated care losses, net of applicable tax subsidies.

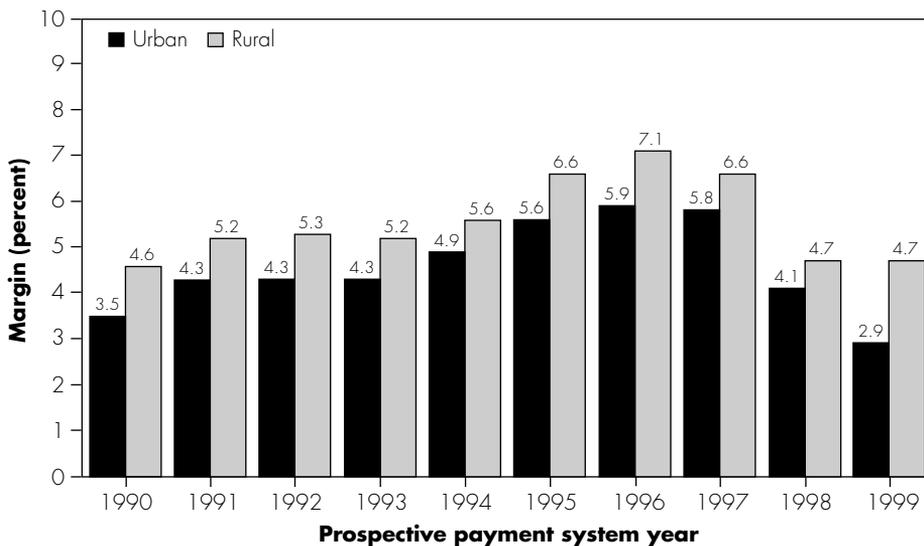
Margins for both urban and rural hospitals grew steadily through the mid-1990s, but began to fall in 1997 and fell steeply in 1998 (Figure C-7). In 1999, rural hospital margins remained flat while urban hospital margins continued to decline. This difference appears attributable to differences in market conditions and business practices.

First, urban hospitals continued to experience substantial declines in their payments from private payers, which was not much of a factor in rural areas. Second, rural hospitals probably took smaller one-time write-offs from divesting alternative lines of business—such as hospital-owned managed care plans and physician practices—because they had not dedicated as many resources to these pursuits. Finally, rural hospitals reduced their Medicare home health services at a rate double that of urban hospitals.

There were signs of substantial improvement in hospital financial performance in fiscal year 2000. Data from the National Hospital Indicators Survey (NHIS, jointly sponsored by HCFA and MedPAC) show that the total margin climbed from 3.2 percent for fiscal year 1999 to 4.7 percent for fiscal year 2000. A key factor in this improvement appears to be better negotiation with managed care and fewer one-time losses from leaving alternate lines of business—neither of which is applicable to most

**FIGURE C-7**

**Total margin, urban and rural hospitals, 1990-1999**



Note: Data for 1999 are preliminary, based on two-thirds of all hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

**TABLE  
C-7**

**Hospital total margin and percent of hospitals with negative margin, by hospital location, 1999**

Hospital location (UIC)	Total margin	Percent with negative margin
Urban, in an MSA (1, 2)	2.9%	36.8%
Rural		
Adjacent to an MSA and includes a town with at least 10,000 people (3,5)	4.5	27.5
Adjacent to an MSA but does not include a town with at least 10,000 people (4,6)	3.9	35.8
Not adjacent to an MSA but includes a town with at least 2,500 people (7,8)	5.3	30.2
Not adjacent to an MSA and does not include a town with at least 2,500 people (9)	-0.4	53.5

Note: UIC (urban influence code, as defined by the U.S. Department of Agriculture). MSA (metropolitan statistical area, as defined by the U.S. Office of Management and Budget). Data are based on Medicare-allowable costs from the Medicare Cost Report. Data are preliminary, based on two-thirds of hospitals covered by prospective payment.

Source: MedPAC analysis of Medicare Cost Report data from HCFA.

rural hospitals. Thus, both the drop in 1999 and the increase in 2000 appear to be urban hospital phenomena. The effect of stock market losses on non-operating revenue in 2000 (and perhaps 2001) could mitigate these gains. However, the fiscal year 2000 NHIS margins reflect data through September 2000, a period of substantial equity losses.

Rural hospitals tend to have a somewhat more favorable distribution of total margins than urban hospitals. In 1999, 37 percent of urban hospitals had negative total margins, compared with 34 percent of rural hospitals. The 10<sup>th</sup> percentile margin (as well as the 25<sup>th</sup> and 50<sup>th</sup>) for rural hospitals is also higher.<sup>8</sup> Among rural hospital groups, Medicare-dependent

hospitals and other rural hospitals with fewer than 50 beds have the greatest proportions with negative margins: 42 and 40 percent, respectively. However, more than 40 percent of hospitals in large urban areas also have negative margins, despite an aggregate Medicare inpatient margin in these areas of 16 percent.

Although rural hospitals generally have higher total margins, the most isolated rural hospitals have the lowest margin—at -0.4 percent—of any of the five geographic areas defined by degree of ruralness (Table C-7). There is an inverse relationship between the Medicare inpatient margin and total margin that is consistent along this spectrum. Urban hospitals and isolated rural hospitals have the highest inpatient margins and the lowest total margins. This suggests that although efforts to increase Medicare payments to hospitals in these areas have had a favorable impact, they have not offset other market pressures. Large urban hospitals face the most financial pressure from uncompensated care and managed care, but the most isolated rural hospitals face pressures from low patient volume and difficulty in attracting skilled workers. These factors underscore that the financial problems of urban and extremely rural hospitals go well beyond Medicare. ■

<sup>8</sup> A percentile margin is defined as the total margin at that point in the distribution. For example, the 10<sup>th</sup> percentile margin is higher than 10 percent of other margins and lower than 90 percent of other margins.

