

NOVEMBER 2001

REPORT TO THE CONGRESS

Paying for
Outpatient Services
in Cancer Hospitals

MEDPAC Medicare
Payment Advisory
Commission

NOVEMBER 2001

REPORT TO THE CONGRESS

Paying for
Outpatient Services
in Cancer Hospitals

MEDPAC Medicare
Payment Advisory
Commission

1730 K Street, NW • Suite 800 • Washington, DC 20006
(202) 653-7220 • Fax: (202) 653-7238 • www.medpac.gov

Executive summary

Executive summary

Cancer hospitals claim they do not fare as well as most other classes of hospitals under the new prospective payment system (PPS) for outpatient services, even after accounting for the provisions mandated by the Balanced Budget Refinement Act of 1999 (BBRA), such as the permanent hold-harmless payment status for cancer hospitals. We cannot determine whether payments under the new outpatient PPS adequately cover the costs of cancer hospitals because claims data for the post-PPS period are not available. However, some evidence raises questions about the appropriateness of the payment system for cancer hospitals because of the narrower mix of services they deliver compared with non-specialty hospitals. In addition, cancer hospitals cannot offset outpatient losses with inpatient revenues as easily as non-specialty hospitals can. Beneficiaries' access to these facilities could ultimately be affected if outpatient payments are not appropriate; consequently, the Commission recommends that the hold-harmless provision mandated by the BBRA continue until data from the outpatient PPS period can be analyzed.

**Paying for Outpatient Services
in Cancer Hospitals**

R E C O M M E N D A T I O N

Until better data are available, the Congress should maintain the current hold-harmless provision for payment for outpatient services in cancer hospitals.

* YES: 13 • NO: 0 • NOT VOTING: 0 • ABSENT: 4

*COMMISSIONERS' VOTING RESULTS

In August 2000, the Health Care Financing Administration (HCFA, now renamed the Centers for Medicare and Medicaid Services (CMS)) began using a prospective payment system (PPS) for outpatient services. The introduction of the outpatient PPS (OPPS) generated considerable concern among the 11 freestanding cancer hospitals and their advocates.¹ Their concern stems from the OPPS paying predetermined rates (based on median costs) for services provided by all hospitals (see text box I for additional description of the OPPS design). The cancer hospitals sought special treatment under the OPPS, arguing that they have a different cost structure because:

- they provide a unique set of services that is more intensive and costly than similar services provided in most other hospitals;
- they provide a more limited mix of services, which decreases their ability to balance costs and payments across service lines;
- they serve a unique population that is sicker than average (including referred patients who have failed treatment elsewhere); and
- they incur additional costs in developing and disseminating new cancer treatments.

The Congress requested that the Medicare Payment Advisory Commission report on the appropriateness of the OPPS for cancer hospitals. Currently, cancer hospitals are protected from losses under the OPPS through a hold-harmless provision, which pays cancer hospitals the greater of the OPPS amount or what they would have been paid under the pre-OPPS system. This provision is permanent for cancer hospitals and is not required to be budget neutral.

This paper examines the appropriateness of the OPPS for cancer hospitals. First, we review evidence on the types of services these hospitals provide and the patients they treat and find some evidence that payments under the PPS may not be accurate for some services offered by cancer hospitals. Second, we review evidence on the financial performance of cancer hospitals and find that cancer hospitals do not have the same ability to offset losses from outpatient services with profits from inpatient services because they are exempt from the inpatient PPS.

Paying for outpatient hospital services in cancer hospitals

The BBRA required that total outpatient payments to cancer hospitals for covered services must be at least 100 percent of what they would have been paid under previous payment policy (see text box on page 5 for additional description of the methods used to calculate hold-harmless payments).² If outpatient PPS payments are lower than they would have been, then additional payments will be made. No adjustments will be made if payments derived based on the outpatient PPS are above the pre-PPS amount.

¹ Under the Omnibus Reconciliation Act of 1989, the Congress defined cancer hospitals with these criteria: (1) recognized by the National Cancer Institute as a comprehensive cancer center or clinical cancer research center as of April 1983, (2) organized primarily for cancer research or treatment, and (3) at least 50 percent of total discharges must have a principal diagnosis of neoplastic disease. Hospitals not meeting these criteria in 1991 can become cancer hospitals through legislative action.

² Children's hospitals are the only other class of hospitals benefiting from a permanent hold-harmless provision.

Design of the outpatient prospective payment system

The outpatient prospective payment system (OPPS) pays for facility costs incurred by hospitals in providing outpatient care to beneficiaries and is centered on a fee schedule. This approach lets hospitals know their reimbursement in advance, giving them an incentive to keep costs below the fee schedule amount. Services delivered by physicians and other professionals are reimbursed separately.

Classifying services. Under the OPPS, outpatient services are classified into 450 ambulatory payment classification (APC) groups, which combine services that are clinically similar and require comparable resources. In response to the BBRA, the Centers for Medicare and Medicaid Studies (CMS) limited the range of costs between the most and least expensive services in a given APC group to a factor of two: the median cost of the most expensive service in the group cannot be more than double the median cost of the least expensive service in the group, with some exceptions. In addition, CMS has created a set of new technology APC groups that places new services into groups based solely on costs.

Bundle of services. The OPPS provides incentives to control costs by incorporating payment for incidental ancillary services and items into the payment amount for a given service. For example, payment for surgery covers hospitals' costs for the operating and recovery room, medical and surgical supplies used in the surgery, anesthesia, and other incidental costs.

Setting payment rates. Payment for a service under the OPPS is derived from the product of a measure of the expected resource use for the service's APC group—the relative weight—and a factor that translates the relative weight into a dollar amount—the conversion factor. The relative weights and the conversion factor are based on 1996 cost and charge data. ■

By comparison, rural hospitals are protected through 2002 from the potentially negative effects of moving to the OPPS, receiving 100 percent of what they would have been paid under previous policy.³ For all other classes of hospitals, transitional corridor payments partially offset losses they might experience as a result of the OPPS through 2004. The amount of the transitional corridor payment varies with the extent of the difference between OPPS payment levels and estimates of payments under prior law, and the time since implementation of the OPPS. CMS adopted this design to give hospitals incentives to achieve costs closer to parity with OPPS payments.⁴

³ MedPAC recently examined whether special circumstances, including having higher outpatient unit costs and relying more on Medicare and on outpatient services as sources of revenue, make it difficult for rural hospitals to keep their costs below the payment rates set by the OPPS. The Commission concluded that rural hospitals are more vulnerable to the financial risks inherent in the OPPS and may have fewer resources available to manage those risks (MedPAC 2001). Consequently, the Commission recommended that the existing hold-harmless policy for small rural hospitals be continued until better information on hospitals' experience with the payment system is available.

⁴ For a detailed discussion of the corridors, see page 40 of MedPAC's June 2000 report to the Congress.

Implementing hold-harmless payments for cancer hospitals

Cancer hospitals will receive additional hold-harmless payments if they suffer losses under the prospective payment system (PPS) for outpatient services. Under this policy, all hospitals must submit claims and be paid the PPS rates. However, cancer hospitals that would have received higher payments under the pre-PPS payment rules than they actually receive under the outpatient PPS will receive an additional payment from the Center for Medicare and Medicaid Services (CMS) to make up the difference. By making additional payments only when a hospital suffers a loss under the PPS, efficiency incentives are maintained. Those hospitals that keep costs below the PPS rates will keep their gains; those suffering a loss are compensated only up to the level of pre-PPS payments, which were based on costs.

By statute, the formula for determining hold-harmless payments (as well as other transitional corridor payments) is current year charges reduced to costs, multiplied by a payment-to-cost ratio. Also by statute, both the cost-to-charge and payment-to-cost ratios used to calculate hold-harmless payments are set by CMS based on 1996 cost reports (exceptions were made in the Medicare, Medicaid, and SCHIP Benefits Improvement Act of 2000 for hospitals without 1996 cost reports).

Although the final hold-harmless payment amounts are determined when hospitals' cost reports are settled, CMS makes monthly interim payments based on submitted claims. As noted in MedPAC's June 2001 analysis of the impact of the outpatient PPS on rural hospitals, initial experience with the interim payments has been mixed, with CMS taking administrative steps to respond to providers' concerns.

Anecdotal reports indicate that the interim payments have been important in protecting some cancer hospitals' cash flow, although others believe that local fiscal intermediaries are not implementing them in a uniform and timely manner. In addition, given that the interim payments are based on submitted claims, problems and delays in claims processing could affect interim payments.

Concerns have also been raised regarding the adequacy of the interim payment amounts. For example, in calculating interim payments, CMS pays only 85 percent of a hospital's estimated interim hold-harmless amount to avoid the need to recoup overpayments upon cost report settlement. Cancer hospitals have proposed that interim payments be reduced by 5 percent rather than 15 percent, claiming that this would be more consistent with how they are paid under the inpatient payment system established by the Tax Equity and Fiscal Responsibility Act of 1982. ■

Applicability of the outpatient payment system to cancer hospitals

Because the OPSS pays predetermined rates for services, hospitals have an incentive to keep costs below the OPSS rates and are at financial risk if their costs are above the OPSS rates. At issue is whether the OPSS is appropriate to pay for covered services delivered by freestanding cancer hospitals and whether the existing hold-harmless policy for cancer hospitals is necessary.

To address these issues, the Commission considered whether the current design of the OPSS accounts for the costs incurred in furnishing outpatient care by cancer hospitals. It appears that cancer hospitals may be disproportionately affected by the OPSS because: 1) outpatient revenues account for a larger proportion of their Medicare payments compared with other hospitals, 2) they provide a narrower mix of services compared with other types of hospitals, 3) the design of the OPSS may result in inaccurate payments for a disproportionate share of services furnished by cancer hospitals, 4) they incur higher per unit costs than most other types of hospitals, and 5) they do not have the same ability as most other hospitals to offset losses from outpatient services with inpatient revenues because they are exempt from the inpatient PPS. Nonetheless, the lack of data about the experience of hospitals with the OPSS to date substantially limits our ability to draw definitive conclusions about the appropriateness of the OPSS for cancer hospitals.⁵

Given these findings and the fact that data are not yet available on the experience of cancer hospitals in the post-OPSS period:

RECOMMENDATION

Until better data are available, the Congress should maintain the current hold-harmless provision for payment for outpatient services in cancer hospitals.

This recommendation acknowledges the Congress's concern about beneficiaries' access to the services provided by cancer hospitals. It also recognizes that a change in the current policy may be appropriate after data are analyzed on cancer hospitals' experience under the OPSS. If it is found that the new payment system pays appropriately for services furnished by cancer hospitals and has not adversely affected beneficiary access to high-quality care, then no adjustments would be needed. Once claims data on the experience of cancer hospitals under the OPSS become available, the extent of hold-harmless payments to facilities will be one way to assess the accuracy of outpatient payments to cancer hospitals. A high proportion of hold-harmless payments relative to other payments (payments for services in APCs, technology pass-through payments, and outlier payments) might suggest that cancer hospitals cannot adapt to the OPSS as well as other classes of hospitals can. Conversely, a low proportion of hold-harmless payments might suggest the provision is not needed.

The rest of this section reviews available evidence regarding cancer hospitals' ability to adapt to the OPSS. We then discuss the limitations of the evidence and outline future policy options for the treatment of cancer hospitals under the OPSS.

⁵ Because CMS found a considerable number of data anomalies in the outpatient claims data for calendar year 2001, these data will not be made available for analysis any sooner than February 2002.

Impact of the outpatient PPS

The permanent hold-harmless provision established by the BBRA had a substantial and positive effect on outpatient payments for cancer hospitals. This conclusion is based on estimates published by CMS about the impact of the OPSS on cancer hospitals before and after the BBRA mandated this provision. CMS estimated that cancer hospitals could lose an average of 32 percent of their revenues under the OPSS before the agency accounted for the hold-harmless provision and other changes required by the BBRA, such as separate payments for certain new technologies (HCFA 1999). By contrast, after accounting for the hold-harmless provision, CMS estimated that cancer hospitals could gain an average of 0.8 percent of their revenues under the OPSS in calendar years 2000 and 2001 (HCFA 2000). Unfortunately, CMS did not estimate the impact of the outpatient PPS on cancer hospitals after accounting for the other changes required by the BBRA but without the hold-harmless provision.

CMS's recent proposal to modify the OPSS for services furnished in calendar year 2002 results in a small increase (1.2 percent) in payments for cancer hospitals that is comparable to the average increase for major teaching hospitals (1.3 percent) but lower than the average increase for all hospitals (2.3 percent) (CMS 2001).⁶

Different payer and service mix

Overall, cancer hospitals are less dependent on Medicare than other hospitals. On average, payments from Medicare accounted for 17.7 percent of total payments for cancer hospitals in 1999. By contrast, Medicare revenues accounted for 30.0 percent of total revenues for all hospitals, 26.1 percent for major teaching hospitals, 30.5 percent for other teaching hospitals, and 32.0 percent for non-teaching hospitals in the same year.

Within Medicare, cancer hospitals tend to provide a greater share of outpatient services than other hospitals. In 1999, Medicare outpatient revenues for eight of the cancer hospitals (with fully processed cost reports) was \$80.8 million, accounting for 31.9 percent of their total Medicare revenues (Table 1). By comparison, Medicare outpatient revenues accounted for 13.8 percent of Medicare revenues for all hospitals, 11.9 percent for major teaching hospitals, and 12.4 percent for other teaching hospitals. However, the extent to which cancer hospitals rely on outpatient services within Medicare substantially varied in 1997-1999, ranging from less than 20 percent to more than 60 percent.

As expected, cancer hospitals tend to provide a different mix of outpatient services than do other classes of hospitals. Categorizing outpatient services based on CMS's Berenson-Eggers Type of Service classification system shows the different mix of services furnished by cancer hospitals compared with other hospitals (Table 2). Not surprisingly, cancer hospitals tend to provide more services related to chemotherapy and radiation therapy and more clinic and office visits than do other classes of hospitals. Representatives from cancer hospitals report that about 90 percent of their patients treated on an outpatient basis have a primary or secondary diagnosis of cancer (Freestanding Cancer Centers 2001). Conversely, cancer hospitals' outpatient departments have a substantially smaller proportion of procedures, particularly major procedures such as coronary angioplasty and orthopedic surgery.

⁶ This proposed rule includes how CMS will determine a wage adjustment factor to adjust for geographic wage differences, modify the APC groups and relative weights, and modify the outlier policy for the payment system in calendar year 2002.

**TABLE
1****Medicare outpatient revenue as percentage
of overall Medicare revenue, 1997–1999**

Hospital type	Outpatient share		
	1997	1998	1999
Overall	13.6%	13.5%	13.8%
Cancer hospitals	30.4	35.0	31.9
Major teaching hospitals	11.4	11.5	11.9
Other teaching hospitals	12.4	12.4	12.4
Non-teaching hospitals	15.5	15.4	15.9

Note: The 1997 and 1998 values for cancer hospitals are based on the 10 cancer hospitals in operation at that time. The 1999 value is based on only eight hospitals because two have not had their 1999 cost reports processed, and one was not yet a cancer hospital in 1999. Major teaching hospitals include facilities in which the ratio of interns and residents to beds exceeds 0.25.

Source: MedPAC analysis of 1997–1999 Medicare cost reports.

The impact of differences in service mix on cancer hospitals depends on the adequacy of the payment rates by type of service. If payments are adequate to cover costs for all services, there will be no differential impact by hospital type due to service mix differences. If, however, the payment-to-cost ratio varies among the services provided, different types of hospitals may do better or worse under the OPSS due to underlying differences in the services provided.

Certain aspects of the design of the OPSS may result in inaccurate payment for services frequently delivered by cancer hospitals. It appears that the method CMS used to establish the relative weights, which measure the expected costliness of a unit in each classification category (APC) compared with the overall average costliness of all units, may result in payments not being accurate for certain services, including chemotherapy and radiation therapy, which are more frequently provided by cancer hospitals than by other hospitals (Table 2). Specifically, CMS used only single-procedure claims to calculate the median cost for services within an APC, which resulted in 55 percent of the outpatient claims being excluded (HCFA 1998).⁷ CMS excluded multiple-procedure claims to minimize the risk of improperly assigning costs to the wrong service. Because of how information was reported on the pre-OPSS outpatient claims, it is difficult to allocate charges or costs for packaged items and services, such as anesthesia and supplies, to a particular service when more than one significant service was billed on a claim. CMS noted that using single procedures to compute the relative weight for services that are not typically billed as a single procedure (including chemotherapy and radiation therapy) could result in payment rates that are not accurate for these services (HCFA 1999). Providers are more likely to submit chemotherapy and radiation therapy on multiple procedure bills because CMS requires that providers bill for repetitive services on a monthly basis or at the conclusion of treatment.

⁷ Single-procedure claims are those for which the procedure code to be grouped to an APC is the only code that appears on the bill, other than incidental services. Multiple-procedure claims included more than one procedure code that could be mapped to an APC. Multiple-procedure bills were used in the other analyses done by CMS, including the impact analysis.

**TABLE
2****Outpatient service mix by type of hospital, 1999**

Service category	Percent of payments by type of hospital					
	All	Cancer	Non-cancer	Major teaching	Other teaching	Non-teaching
Evaluation and management	13.8%	17.8%	13.7%	19.0%	12.0%	13.3%
Clinic/office visits	7.3	15.8	7.2	13.5	6.2	6.0
Emergency/critical care	6.3	0.6	6.3	4.8	5.6	7.1
Consultations	0.2	1.3	0.2	0.7	0.1	0.1
Procedures	46.2	33.0	46.3	43.7	49.5	45.0
Major procedures	10.6	4.1	10.7	11.2	13.3	8.9
Minor and ambulatory procedures	10.8	7.9	10.8	8.9	10.5	11.5
Eye procedures and ophthalmology services	10.6	0.0	10.7	9.9	10.1	11.2
Endoscopy	8.6	4.6	8.6	6.9	8.4	9.2
Radiation therapy	5.6	16.4	5.5	6.8	7.2	4.2
Imaging	31.1	27.2	31.1	26.2	30.3	33.0
Standard imaging	11.5	6.8	11.6	9.0	10.7	12.8
Advanced imaging	11.1	17.5	11.1	9.5	10.7	11.8
Echography	5.9	2.6	5.9	5.4	5.4	6.3
Other imaging	2.5	0.2	2.5	2.2	3.4	2.1
Testing	4.2	1.4	4.3	4.2	4.1	4.3
Cardiology tests (EKG, stress tests)	1.9	0.8	1.9	1.6	1.8	2.1
Other tests	2.3	0.7	2.3	2.5	2.3	2.2
Other services	4.7	20.6	4.6	6.9	4.1	4.3
Psychiatric services	1.7	0.0	1.7	2.5	1.5	1.7
Other specialty services	0.6	0.0	0.6	0.3	0.6	0.7
Chemotherapy	1.9	19.7	1.8	3.4	1.6	1.5
All other services	0.4	0.9	0.4	0.7	0.3	0.3

Note: EKG (electrocardiogram). Payment for a service is approximated by multiplying units of care by the payment rate for the service from the outpatient prospective payment system. Major teaching hospitals include facilities in which the ratio of interns and residents to beds exceeds 0.25. Major procedures include services such as breast surgery, coronary angioplasty, pacemaker insertion, and orthopedic surgery. Minor and ambulatory procedures include services such as hernia repair, lithotripsy, and skin/musculoskeletal procedures.

Source: MedPAC analysis of 5 percent standard analytic claims files, 1999.

Excluding multiple-procedure claims to calculate the median cost for services within an APC also may skew the calculation of the APC weights if multiple-procedure claims are more frequently submitted by hospitals incurring higher average costs than other hospitals. Preliminary analysis by Project HOPE supports this assertion, indicating that hospitals incurring higher costs are more likely to submit multiple-procedure claims than lower-cost hospitals (Project HOPE 2001). As presented in the next section, CMS found that cancer hospitals have higher per unit costs, on average, than do other hospitals.

Another potential bias in the OPSS concerns the relative weights for clinic and emergency services. CMS developed APC groups with relative weights for clinic and emergency visits based on the intensity of services provided (low, middle, and high). The agency did not use patient diagnosis codes to compute payment rates for medical visits to clinics and emergency departments because of concerns about the validity of the International Classification of Diseases (9th revision clinical modification) diagnosis codes. Several industry groups have suggested that payment rates for clinic visits may not be accurate because of previous coding practices (at many hospitals, all visits were coded at the lowest level). Consequently, payments for clinic and emergency visits may not be accurate for hospitals that treat, on average, more complex patients compared with other hospitals.

As a group, cancer hospitals have more at stake than many other non-specialty hospitals in the move to the OPSS because of their overall greater reliance on outpatient services within Medicare. However, substantial variation exists in the extent to which individual cancer hospitals depend on Medicare outpatient revenues. The different service mix may result in cancer hospitals being disproportionately affected by the OPSS compared with other classes of hospitals. Given the newness of the OPSS and the lack of any claims data since CMS implemented it, no solid evidence exists regarding services that may be more or less adequately reimbursed.

Higher unit costs

CMS found that the cancer hospitals had unit costs (standardized for service mix) that were at least 20 percent higher than those of other hospitals (HCFA 1998). The agency attributed these higher costs to under-coding, because proper coding was not required for the payment of many services under the pre-OPSS payment system. However, other reasons may also contribute to the higher unit costs incurred by cancer hospitals.

Cancer hospitals may incur higher unit costs due to the nature of the patients they treat. Representatives from cancer hospitals claim that they treat a high concentration of relatively complex patients, with 22 to 70 percent of their patients referred to their facilities from other institutions (Freestanding Cancer Hospitals 2001). These findings, however, do not necessarily mean that patients treated at cancer hospitals are of greater acuity, on average, than patients treated at other classes of hospitals, particularly major academic teaching hospitals. MedPAC was not able to find any evidence in the medical literature showing that the acuity of patients treated at cancer hospitals differed from the acuity of patients treated at other classes of hospitals.

A cancer hospital also may incur additional costs in fulfilling the role of a comprehensive cancer center, designated by the National Cancer Institute (NCI).⁸ The NCI requires comprehensive cancer centers to offer services related to disease prevention, basic scientific research, and clinical research (NCI 2001). For example, cancer hospitals claim that they incur higher per unit costs than other hospitals, on average, because:

⁸ There are 41 comprehensive cancer centers, including the 11 freestanding cancer centers.

- they actively participate in basic, clinical, and applied research, with approximately 20 percent of their patients enrolled in clinical trials.⁹
- they are more likely to develop and use state-of-the-art procedures to diagnosis and treat cancer patients.

MedPAC was not able to find any evidence in the medical literature showing that cancer hospitals participate in research activities any more than other classes of hospitals. Cumulatively, these research activities may affect the unit costs of care incurred by cancer hospitals. However, these activities may also affect the unit costs of care of other hospitals involved in similar activities, including the 30 other hospitals that the NCI has designated as comprehensive cancer centers. If these activities contribute to higher costs, it is not clear that financial support should come through Medicare reimbursement of outpatient services.

Some have argued that as a matter of public policy, we may wish to accommodate higher costs in cancer hospitals because they serve an important function in their role as comprehensive caregivers for cancer patients, and because they provide access to high-quality care. Recent evidence suggests that because of the higher volume of procedures that cancer hospitals perform compared with many other hospitals, the quality of care for certain inpatient procedures is higher (Roohan et al. 1998, Schrag et al. 2000).

One feature of the design of the OPSS—the use of median cost values, not means, in determining APC payment weights—may disproportionately affect hospitals that incur high per unit costs. Before enactment of the BBRA, CMS was required to base the calculations of the APC weights on median hospital cost values. This requirement resulted in lower payment rates being set for APC groups than if the agency used mean values. Although the BBRA permitted CMS to use either median or mean cost values in its calculations, the agency decided to continue to use median values, fearing that re-calculating the APC weights using mean values would have delayed the implementation of the OPSS (HCFA 2000).

The need for maintaining the existing hold-harmless policy is supported if cancer hospitals have higher costs than other hospitals because they treat patients of higher acuity. Once data on the experience of cancer hospitals under the OPSS become available, the extent of hold-harmless payments to facilities will be one way to assess the accuracy of outpatient payments to cancer hospitals.

⁹ Beginning in September 2000, Medicare began covering the routine costs of qualifying clinical trials, as well as reasonable and necessary items and services used to diagnose and treat complications arising from participation in clinical trials. Notwithstanding this new policy, Medicare does not pay for clinical trial services that are 1) statutorily excluded or for which there is a national non-coverage decision or 2) provided solely to satisfy data collection and analysis needs and that are not used in the direct clinical management of the patient. Several studies demonstrated that clinical trials may add up to 10 percent to the cost of cancer care (Chirikos et al. 2001, Fireman et al. 2000, Wagner et al. 2000).

Hospital financial performance

A cancer hospital's financial position is reflected in its margins.¹⁰ Before the introduction of the OPSS, cancer hospitals had lower Medicare outpatient margins in 1999 (-21.8 percent) compared with all hospitals (-17.0 percent), major teaching hospitals (-18.6 percent), and other teaching hospitals (-15.7 percent) (Table 3). Interpreting outpatient margins can be difficult, however, and the numbers presented here may understate outpatient financial performance, particularly for non-specialty hospitals. For non-specialty hospitals, previous payment policy—which paid for most outpatient services based on costs, while inpatient services were paid for under the inpatient PPS—provided an incentive to over-allocate fixed costs to outpatient services. In part to counteract this trend, previous payment system rules set payments below reported costs, leading to negative outpatient margins for all hospitals.

By contrast, cancer hospitals are exempt from the acute care PPS for inpatient services and are paid according to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA).¹¹ Under this system, cancer hospitals' payments for inpatient operating costs are based on each facility's Medicare allowable inpatient operating costs, subject to a limit based on a target in Medicare operating costs per discharge. Cancer hospitals with Medicare-allowable inpatient operating costs less than their target amount per discharge receive their costs plus an additional payment (known as an incentive payment) that is the lesser of 15 percent of the difference between its costs and the TEFRA target amount, or 2 percent of the TEFRA target amount. Medicare-allowable capital costs are paid in their entirety.¹²

As shown in Table 3, inpatient margins for the cancer hospitals were negative and ranged from -2.7 percent in 1997 to -6.9 percent in 1999. By contrast, the inpatient margin in 1999 was 12.1 percent for all hospitals, 23.3 percent for major teaching hospitals, and 11.9 percent for other teaching hospitals.

Having low inpatient margins means that cancer hospitals do not have the same ability to offset potential outpatient losses with inpatient revenues. As shown in Table 3, cancer hospitals' overall Medicare margin, which includes all services paid for by Medicare, was -14.8 percent in 1999. By contrast, the overall Medicare margin of non-specialty hospitals ranged from -0.2 percent (non-teaching hospitals) to 13.9 percent (major teaching hospitals).

Because the OPSS pays hospitals a fixed amount per service, hospitals with costs above the payment amount absorb the loss; if costs are below payments, hospitals keep the gain. The OPSS does include an outlier payment, but hospitals still bear some of the costs associated with outliers.¹³ With a large volume of services and a diversified service line, a hospital can offset losses on some services by gains on others. However, the limited scope of cancer hospitals (exhibited in Table 2) make such cost-shifting less feasible.

¹⁰ A margin represents the difference between providers' Medicare payments and costs, divided by payments.

¹¹ The Secretary exempted cancer hospitals from the inpatient PPS, permitting them to continue to be reimbursed under the reasonable cost system subject to the TEFRA cost limits, primarily because the diagnosis related groups classification system used in the inpatient PPS was thought to be a poor predictor of resource use for patients in cancer hospitals.

¹² Cancer hospitals were excluded from the changes made by the BBA and BBRA in the way Medicare pays facilities exempt from inpatient PPS (MedPAC 2000).

¹³ CMS currently assesses outliers at the claim level. Costs must exceed the payment rate by a factor of 2.5. Hospitals are then reimbursed 75 percent of costs above this threshold. The outlier provision is budget neutral (money for outlier payments comes from reducing the base payment rate for all services), with a limit on outlier payments of 2.5 percent of total outpatient program payments through 2001 and 3.0 percent thereafter. CMS has proposed to begin calculating outlier payments for individual services beginning in January 2002 (CMS 2001).

**TABLE
3****Medicare outpatient, inpatient, and overall margins
including graduate medical education, 1997–1999**

Margin type	1997	1998	1999
Outpatient margin			
Overall	-6.7%	-16.7%	-17.0%
Cancer hospitals	-9.4	-17.3	-21.8
Major teaching hospitals	-10.0	-20.4	-18.6
Other teaching hospitals	-6.4	-15.3	-15.7
Non-teaching hospitals	-5.7	-16.1	-17.1
Inpatient margin			
Overall	16.9%	13.8%	12.1%
Cancer hospitals	-2.7	-5.4	-6.9
Major teaching hospitals	28.2	24.1	23.3
Other teaching hospitals	15.9	13.2	11.9
Non-teaching hospitals	12.0	8.9	6.3
Medicare overall margin			
Overall	10.4%	5.9%	4.8%
Cancer hospitals	-7.6	-11.8	-14.8
Major teaching hospitals	19.2	14.3	13.9
Other teaching hospitals	10.1	6.2	5.3
Non-teaching hospitals	6.6	1.6	-0.2

Note: The margin for outpatient and inpatient care includes both operating and capital payments. The overall Medicare margin includes operating and capital payments and costs of inpatient, outpatient, home health, skilled nursing facility, and exempt unit services, as well as graduate medical education and Medicare bad debt. The 1997 and 1998 values for cancer hospitals are based on all 10 cancer hospitals in operation at that time. The 1999 value is based on only 8 of 11 hospitals because 2 have not had their 1999 cost reports processed, and 1 was not yet a cancer hospital. Major teaching hospitals include facilities in which the ratio of interns and residents to beds exceeds 0.25.

Source: MedPAC analysis of 1997–1999 hospital cost report data.

Limitations of the evidence

The evidence presented above suggests that cancer hospitals may be vulnerable to the financial risks inherent in prospective payment and may be less able to offset outpatient losses with inpatient revenues than other classes of hospitals. Nonetheless, assessment of the applicability of the OPSS to cancer hospitals is hampered by a lack of experience and data under the new payment system. Some questions can only be answered using claims, cost reports, and other evidence from hospitals operating under the system. These questions include:

- Will adjusted unit costs for cancer hospitals continue to be higher than for other hospitals under the OPSS?
- To what extent do cancer hospitals receive hold-harmless payments, indicating that their OPSS payments are below the pre-OPSS levels? Do they receive more hold-harmless payments than other hospitals would receive if they were held harmless?
- How have outpatient margins changed under the new payment system? Is there evidence of increased (or decreased) financial pressure?
- Do we have evidence of impaired access to outpatient services in cancer hospitals that can be attributed to the new payment system?

Analysis of data from experience under the new payment system may show that cancer hospitals can adapt to the OPSS or it may reveal systemic problems. In the meantime, the current hold-harmless provision protects beneficiaries' access to care in cancer hospitals.

Future policy options

If additional data show that cancer hospitals face special circumstances that make it more difficult for them to cover their costs under the OPSS, then the payment system should recognize those circumstances and make appropriate accommodations. If, however, cancer hospitals are found to have adapted to outpatient prospective payment without compromising access and quality, no adjustments would be needed.

In the event that cancer hospitals need assistance in covering costs, the ideal policy would contain financial incentives to control costs, be administratively feasible, and target additional payments only to those hospitals that truly need them. It is not clear that the hold-harmless provision provides sufficient protection to the cancer hospitals or that it effectively satisfies these three criteria. Hence, we consider two alternatives. The extent to which each alternative embodies these three characteristics provides one framework for judging the most appropriate policy. Adopting either of these alternatives would require difficult decisions regarding exact design specifications and identification of the facilities to benefit.

Separate conversion factor

A separate conversion factor would pay cancer hospitals more for all outpatient services delivered. This policy would recognize any structural differences that make delivering outpatient services uniformly more expensive for cancer hospitals. It would maintain incentives for efficiency by maintaining the structure of the OPSS, but pay relatively more per service. By maintaining the structure of the OPSS, a separate conversion factor also allows CMS and its fiscal intermediaries to maintain one billing system. There would be no need for special adjustments or settlements. However, a separate conversion factor may not be needed for cancer hospitals that are larger and/or more efficient. In addition to recognizing legitimately higher costs, this approach also may reward inefficiency and excess capacity.

Cost-based payment

Some proponents have argued that, due to the unique characteristics of cancer hospitals, prospective payment carries too many risks and payment should be made on a cost or cost-plus basis. One possibility is a system similar to the TEFRA system for reimbursing cancer hospitals' inpatient services. If a hospital's annual costs are below a pre-determined limit, it would be reimbursed its costs plus a bonus. If costs exceed the limit, payments would equal the limit plus some amount less than the difference between costs and the limit. The limit would be specific to each provider and updated each year to allow for changes in input prices.

This system has incentives to control costs because it rewards hospitals below their limits and punishes hospitals above their limits. At the same time, it partially offsets the losses by hospitals above their limits, so it provides additional payments to hospitals that need them. However, this policy may reward inefficiency, and it would require the CMS to develop a new payment system. ■

References

Center for Medicare & Medicaid Services, Department of Health and Human Services. Medicare program; changes to the hospital outpatient prospective payment system and calendar year 2002 payment rates; proposed rule. *Federal Register*. August 24, 2001, Vol. 66, No. 165.

Chirikos TN, Ruckdeschel JC, Krischer JP. Impact of clinical trials on the cost of cancer care, *Medical Care*. April 2001, Vol. 39, No. 4, p. 373-83

Fireman BH, Fehrenbacher L, Gruskin EP, Ray GT. Cost of care for patients in cancer clinical trials, *J Natl Cancer Inst*. Jan 2000, Vol. 92, No. 2, p. 136-142.

Freestanding Cancer Hospitals. The Freestanding cancer centers: a national resource. Report prepared for the Medicare Payment Advisory Commission. June 4, 2001.

Health Care Financing Administration, Department of Health and Human Services. Medicare program prospective payment system for hospital outpatient services; proposed rule. *Federal Register*. September 8, 1998, Vol. 63, No. 173, p. 47581.

Health Care Financing Administration, Department of Health and Human Services. Medicare program prospective payment system for hospital outpatient services; final rule. *Federal Register*. June 30, 1999, Vol. 64, No. 125.

Health Care Financing Administration, Department of Health and Human Services. Medicare program prospective payment system for hospital outpatient services; final rule. *Federal Register*. April 7, 2000, Vol. 65, No. 68, p. 18433-18820.

Medicare Payment Advisory Commission. Report to the Congress: Medicare in rural America. Washington (DC), MedPAC. June 2001.

National Cancer Institute. What are NCI-designated cancer centers? <http://cancertrials.nci.nih.gov/finding/centers/html/what.html>. Accessed August 7, 2001.

Project Hope 2001. Personal communication from P. Mohr to N. Ray, August 10, 2001.

Prospective Payment Review Commission. Interim report on payment reform for PPS-excluded facilities. Washington (DC), PPRC. October 1992.

Roohan PJ, Bickell NAA, Baptise, MS, et al. Hospital volume differences and five-year survival from breast cancer, *American Journal of Public Health*. March 1998, vol. 88, no. 3, p. 454-457.

Schrag D, Cramer LD, Bach PB, et al. Influence of hospital procedure volume on outcomes following surgery for colon cancer, *JAMA*. December 20, 2000, Vol. 284, No. 23, p. 3028-3035.

Wagner JL, Alberts SR, Sloan JA, et al. Incremental costs of enrolling cancer patients in clinical trials: a population-based study, *J Natl Cancer Institute*. May 1999, Vol. 91, No. 10, p. 847-853.

Commissioners' voting on recommendation

In the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (BIPA), the Congress required MedPAC to call for individual Commissioner votes on each recommendation, and to document the voting record in its report. The information below satisfies that mandate.

Recommendation

Until better data are available, the Congress should maintain the current hold-harmless provision for payment for outpatient services in cancer hospitals.

Yes: Feezor, Hackbarth, Loop, Muller, Nelson, Newhouse, Newport, Raphael, Reischauer, Rowe, Smith, Stowers, Wakefield

Absent: Braun, Burke, DeBusk, Rosenblatt

More about MedPAC

Commission members

Glenn M. Hackbarth, J.D., chairman

Independent consultant
Bend, OR

Robert D. Reischauer, Ph.D., vice chairman

The Urban Institute
Washington, DC

Term expires April 2002

Beatrice S. Braun, M.D.

AARP Board of Directors
Spring Hill, FL

Floyd D. Loop, M.D.

The Cleveland Clinic Foundation
Cleveland, OH

Janet G. Newport

PacifiCare Health Systems
Santa Ana, CA

Carol Raphael

Visiting Nurse Service of New York
New York, NY

**Mary K. Wakefield, Ph.D.,
R.N., F.A.A.N**

College of Nursing and Health Science
George Mason University
Fairfax, VA

Term expires April 2003

Autry O.V. "Pete" DeBusk

DeRoyal
Powell, TN

Glenn M. Hackbarth, J.D.

Alan R. Nelson, M.D.
*American College of Physicians—
American Society of Internal Medicine*
Washington, DC

Robert D. Reischauer, Ph.D.

David A. Smith
AFL-CIO
Washington, DC

Ray E. Stowers, D.O.

*Oklahoma State University College of
Osteopathic Medicine*
Tulsa, OK

Term expires April 2004

**Sheila P. Burke, M.P.A.,
R.N., F.A.A.N**

Smithsonian Institution
Washington, D.C.

Allen Feezor, M.A.

*California Public Employees'
Retirement System*
Sacramento, CA

Ralph W. Muller

*University of Chicago Hospitals
and Health Systems*
Chicago, IL

Joseph P. Newhouse, Ph.D.

Harvard University
Boston, MA

**Alice Rosenblatt, F.S.A.,
M.A.A.A.**

WellPoint Health Networks
Thousand Oaks, CA

John W. Rowe, M.D.

Aetna Inc.
Hartford, CT

Commission staff

Murray N. Ross, Ph.D.
Executive director

Lu Zawistowich, Sc.D.
Deputy director

Jennifer Jenson, M.P.H., M.P.P.
Special assistant to the executive director

Helaine I. Fingold, J.D.
General counsel

Research directors
.....

Jack Ashby, M.H.A.
Scott Harrison, Ph.D.
Kevin J. Hayes, Ph.D.
Karen Milgate, M.P.P.
Sally Kaplan, Ph.D.
Julian H. Pettengill, M.A.

Administrative support
.....

Reda Broadnax, B.S.
Wylene Carlyle
Diane E. Ellison
Plinie (Ann) Johnson
Cheron McCrae
Dominic F. Taylor, B.S.
Cynthia Wilson

Analysts
.....

Sharon L. Bee, M.S.
David V. Glass, M.S.
Timothy F. Greene, M.B.A.
Jesse Patrice Kerns, M.P.P.
Craig K. Lisk, M.S.
Marian Lowe
Mary B. Mazanec, M.D., J.D.
Nancy Ray, M.S.
Susanne Seagrave, Ph.D.
Mae Thamer, Ph.D.
Ariel Winter, M.P.P.
Chantal Worzala, Ph.D.
Daniel Zabinski, Ph.D.



**1730 K Street, NW • Suite 800 • Washington, DC 20006
(202) 653-7220 • Fax: (202) 653-7238 • www.medpac.gov**