Special Report

Prospective payment for Medicare skilled nursing facilities: Background and issues

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Strong interest by Congress in a Medicare prospective payment system for skilled nursing facilities (SNF's) resulted in a major study by the Health Care Financing Administration on the Medicare SNF benefit. This article highlights findings from that study, which addressed the following: the Medicare SNF benefit, utilization and expenditures, the Medicare SNF industry, problems with the current Medicare SNF reimbursement system, efforts to develop a Medicare SNF case-mix measure, and case-mix differences between hospital-based and freestanding SNF's. In addition, we discuss the implications of the study findings for the design of a Medicare SNF prospective payment system (PPS).

Introduction

Prospective payment systems (PPS's) are increasingly replacing retrospective, cost-based reimbursement methodologies. This change has been prompted by general dissatisfaction with the latter method, which, it is widely accepted, does not encourage efficiency because it does not reward cost-containing behavior. During the last 3 years, Medicare has implemented PPS's for acute care hospitals, renal dialysis facilities, hospices, and freestanding ambulatory surgical centers. In addition, there has been strong congressional interest in developing a Medicare PPS for skilled nursing facilities (SNF's). This interest was reflected by the recently enacted Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), which provided for an optional prospective payment rate for SNF's with fewer than 1,500 patient days.

The COBRA provision resulted, in part, from analyses of the Medicare SNF benefit conducted by the Department of Health and Human Services (DHHS) in response to provisions in the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982, the Social Security Amendments of 1983, and the Deficit Reduction Act of 1984. The first result of these analyses was a Health Care Financing Administration (HCFA) report entitled *Study of the Skilled Nursing Facility Benefit Under Medicare*, which was submitted to Congress in April 1985 (Health Care Financing Administration, 1985). This article highlights findings from that report and elaborates on them.

Background and context

The Medicare skilled nursing benefit covers short-term (up to 100 days), post-acute nursing home care for people needing skilled nursing or rehabilitative services in an inpatient setting. The Social Security Act sets stringent requirements concerning the level of skilled care necessary to qualify for Medicare coverage. Hence, Medicare-covered SNF care differs from the long-term care covered by the Medicaid nursing home benefit. In 1980, the average Medicare coverage of an SNF stay was 30 days, much shorter than the average stay of 456 days for all nursing home patients.

The Medicare SNF benefit is small both as a percentage of Medicare expenditures and as a proportion of total national nursing home revenues. The $529 million spent for Medicare SNF benefits in calendar year 1983 constituted slightly less than 1 percent of total Medicare expenditures. This was slightly less than 2 percent of all nursing home expenditures. On the other hand, in 1983, about 31 percent of Medicaid expenditures was for nursing home care (SNF and intermediate care facility [ICF]), and Medicaid accounted for nearly 50 percent of all nursing home expenditures. The 50 percent substantially understates the role of Medicaid in the nursing home industry. This is because Medicaid recipients must contribute all but $25 of their monthly income towards their cost of care; these contributions are counted in HCFA statistics as private, out-of-pocket payments.

Since 1975, both total expenditures and per diem payments for Medicare SNF care have increased at a modest rate. Total expenditures increased from $278 million in 1975 to $529 million in 1983, at an average annual rate of growth of 8.4 percent (Table 1). Per diem payments increased at an annual compound rate of 7.7 percent during the 1975 to 1983 period. During the same period, the SNF "market basket," a measure of the costs of inputs (e.g., food, utilities, and nursing wages) used to provide a day of nursing home care, grew at an annual compound rate of 8.3 percent.

Since 1973, Medicare-covered SNF days per year have been generally stable at about 9 million days (Table 2). A covered day is one that meets the conditions necessary for Medicare payment. Between 1973 and 1983, however, the number of covered days per 1,000 Medicare enrollees tended to decline both for aged and disabled enrollees. In 1980, there were approximately 274,000 Medicare SNF admissions

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Table 1

Total and per diem Medicare skilled nursing facility (SNF) payments: Calendar years 1975–83

Calendar year	Total payments		Per diem payment		SNF market basket percent change
	Expenditures in millions	Percent change	Amount	Percent change	
1975	$278	—	$31.31	—	—
1976	327	17.6	33.64	7.4	7.3
1977	362	10.7	37.59	11.7	6.8
1978	347	(−4.1)	38.64	2.8	8.8
1979	368	6.1	43.60	12.8	9.2
1980	396	7.6	47.03	7.9	9.9
1981	433	9.3	51.67	9.9	9.6
1982	468	8.1	54.04	4.6	7.4
1983[1]	529	13.0	56.75	5.0	5.7
Annual compound rate of growth 1975–83	—	8.4	—	7.7	8.3

[1] Estimate.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

Table 2

Medicare-covered days in skilled nursing facilities: Calendar years 1973–83

Calendar year	Covered days in millions	Covered days per 1,000 beneficiaries	Covered days per 1,000 aged beneficiaries	Covered days per 1,000 disabled beneficiaries
1973	8.63	373.58	398.70	61.76
1974	8.97	377.76	398.29	144.28
1975	8.88	363.10	385.26	133.90
1976	9.72	387.18	413.84	132.93
1977	9.63	373.24	399.59	128.33
1978	8.98	338.18	364.46	113.56
1979	8.44	309.96	333.98	108.38
1980	8.42	302.32	325.91	103.39
1981	8.38	297.47	321.72	94.48
1982	8.66	301.10	24.19	96.89
1983[1]	9.32	319.76	342.76	102.82

[1] Estimate.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

involving at least 1 covered day (data not shown). With the advent of hospital prospective payment by Medicare, preliminary data indicate that there has been a slight increase in Medicare SNF utilization.

Medicare skilled nursing facilities

A nursing home can be certified in whole, or in part, for participation in Medicare, Medicaid, or both programs. About 5,000 nursing homes are certified to provide Medicare services, about two-thirds of all SNF's. For a variety of reasons, only 3,492 facilities submitted complete cost reports in fiscal year 1980. Of the SNF's that filed cost reports, approximately two-thirds are proprietary (for profit), with the rest divided between government and nonprofit facilities (Table 3). Eighty-six percent of the Medicare-certified facilities are freestanding. For participating SNF's, Medicare accounts for an average of 14 percent of patient days in these facilities (not on table).

However, fewer than 400 SNF's provide 40 percent of total Medicare days (not on table); these facilities are highly dependent on Medicare revenues. The vast majority of certified SNF's provide very few Medicare days.

The approximately 500 hospital-based facilities are evenly divided between urban and rural locations. Hospital-based facilities tend to provide proportionately more care to Medicare beneficiaries than freestanding SNF's, accounting for 20 percent of total days while supplying only 10 percent of certified beds.

The availability of Medicare-certified SNF beds in all types of facilities varies across States. In fiscal year 1981, Medicare SNF beds per 1,000 elderly varied from a low of 1 in Arkansas and Oklahoma to a high of 51 in North Dakota; the State average was 18. The use rate of the Medicare SNF benefit also varied across States from a low of 1 day of Medicare-covered SNF care per 1,000 elderly in Wyoming to a high of 635 in Kentucky; the State average was 310.

The average total cost per day for Medicare SNF services (i.e., routine operating, ancillary, and capital) was $80 in fiscal year 1983, of which 72 percent was for routine operating costs, 22 percent for ancillary costs, and 6 percent for capital costs (Table 4). Hospital-based facilities are much more costly than freestanding facilities.

A multivariate regression analysis was conducted to study the effects of different facility characteristics (e.g., ownership, size) on total, routine operating, ancillary, and capital costs. The results, presented in Table 5, show that the facility characteristics included in the analysis explain a substantial amount of variation in total cost (nearly 55 percent) and in routine operating costs (55 percent). These characteristics do less well in explaining variations in ancillary costs (26 percent) and quite poorly in explaining capital costs (17 percent). The regression analysis estimates how much each facility characteristic affects costs when all others are held

Table 3
Number and percent of skilled nursing facilities, beds, and Medicare patient days, by type of ownership and facility: Fiscal year 1980

Type of ownership and facility	Medicare-certified facilities		Medicare-certified beds		Medicare patient days		Total patient days	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	3,492	100.00	276,986	100.00	7,359,135	100.00	94,497,364	100.00
Hospital-based	488	13.98	28,465	10.27	1,467,738	19.94	9,291,636	9.83
Freestanding	3,004	86.02	248,521	90.73	5,891,397	80.06	85,205,728	90.17
Proprietary (total)	2,318	66.38	176,077	3.57	4,779,656	64.95	60,070,063	63.57
Hospital-based	40	1.15	2,088	.75	216,341	2.94	662,671	.70
Freestanding	2,278	65.23	173,989	62.82	4,563,315	62.01	59,407,392	62.87
Nonprofit (total)	854	24.46	67,323	24.31	1,966,745	26.72	22,953,749	24.29
Hospital-based	283	8.10	14,742	5.32	918,865	12.48	4,772,837	5.05
Freestanding	571	16.35	52,581	18.98	1,047,880	14.24	18,180,912	19.24
Government (total)	320	9.16	33,586	12.12	612,734	8.33	11,473,552	12.14
Hospital-based	165	4.73	11,635	4.20	332,532	4.52	3,856,128	4.08
Freestanding	155	4.44	21,951	7.92	280,202	3.81	7,617,424	8.06

SOURCE: The Urban Institute: Data from the Medicare Skilled Nursing Facility Study, 1983.

Table 4
Average for skilled nursing facilities per diem costs, by type of facility and cost: Fiscal year 1983

Type of cost	All facilities		Hospital-based		Freestanding	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
Total costs[1]	$79.78	$65.39	$131.51	$102.70	$61.80	$34.32
Routine operating costs	57.63	45.82	94.98	65.97	47.51	30.24
Routine nursing	23.24	18.24	36.85	27.69	19.03	11.36
Routine overhead	34.39	29.20	58.14	42.31	28.48	20.28
Medicare ancillary costs	17.23	24.28	29.75	44.63	11.33	14.55
Drugs and supplies	6.90	9.49	8.18	13.85	4.62	8.95
Therapy	10.33	19.90	21.57	37.94	5.71	11.09
Capital costs	4.92	6.02	6.78	11.41	3.96	4.40

[1]Totals may not add because of rounding.

NOTE: Per diem costs are weighted by Medicare days.

SOURCE: The Urban Institute: Data from the Medicare Skilled Nursing Facility Study, 1983.

constant. In Table 5, for example, the hospital wage index, number of Medicare-certified beds, percentage of total inpatient days that are Medicare, admissions per bed, freestanding distinct-part facility, and hospital-based facility increase total facility costs, while the other characteristics decrease total facility costs.

Problems with the current system

Currently, Medicare services in SNF's are largely reimbursed on a retrospective, reasonable cost basis, subject to limits applied to routine operating costs (e.g., nursing, meals). Ancillary costs, such as physical therapy, drugs, and capital, are not included in the cost limits. The cost limits are set at 112 percent of the average costs of urban and of rural facilities. Prior to October 1, 1982, separate limits were in effect for hospital-based and freestanding facilities. TEFRA eliminated these dual cost limits, mandating single limits based on the lower costs of the freestanding facilities, subject to such adjustments as the Department of Health and Human Services Secretary deemed appropriate. The Deficit Reduction Act of 1984 extended the pre-TEFRA dual limits to July 1, 1984. After July 1, 1984, reimbursement limits for hospital-based SNF's would be set at the corresponding limits for freestanding SNF's plus the following: 50 percent of the amount by which 112 percent of the hospital-based SNF costs exceeded the limit for freestanding SNF's. An add-on to the hospital-based rate ceiling for the additional costs due to the Medicare cost allocation process is also required.

Responding to reports of limited beneficiary access to SNF's, Congress, as part of COBRA, developed an option with strong incentives to increase Medicare program participation. Low-utilization SNF's, with fewer than 1,500 Medicare days, may elect to be paid 105 percent of mean operating and capital costs of all (both hospital-based and freestanding) facilities rather than be paid their actual costs. Separate rates are

Table 5

Dependent variables of skilled nursing facility per diem costs, by independent variables: Fiscal year 1980

Independent variables	Dependent variables[1]			
	Total costs	Routine operating costs	Medicare ancillary costs	Capital costs
Constant	$51.13	$39.33	$5.87	$5.93
Rural area	-2.01	0.05	-1.95	-0.01
	(-2.06)	(-0.073)	(-4.12)	(-0.04)
Proprietary facility	-11.92	-14.92	1.48	1.52
	(-8.58)	(-14.91)	(2.18)	(7.86)
Nonprofit facility	-0.81	-3.31)	1.09	1.41
	(-0.60)	(-3.39)	(1.65)	(7.49)
Hospital wage index	48.40	37.59	9.14	1.67
	(19.17)	(20.67)	(7.44)	(4.76)
Number of Medicare-certified beds	0.03	0.03	0.14	0.03
	(4.90)	(8.10)	(-3.47)	(5.45)
Percent of total inpatient days that are Medicare	0.46	0.30	0.14	0.03
	(19.80)	(17.59)	(12.04)	(9.12)
Admissions per bed	0.40	0.25	0.16	-0.02
	(4.01)	(3.45)	(3.46)	(-1.15)
Certified bed occupancy in 1980	-0.46	-0.33	-0.70	-0.64
	(-12.90)	(-12.69)	(-4.03)	(-12.97)
Freestanding distinct-part facility	2.57	3.02	-0.90	0.45
	(3.06)	(5.00)	(-.221)	(3.86)
Hospital-based facility	31.98	21.15	9.71	1.12
	(23.48)	(21.57)	(14.66)	(5.91)
Chain facility[1]	-3.40	-4.59	1.89	-.70)
	(-3.58)	(-6.72)	(4.10)	(5.34)
Variance explained	54.56	55.33	26.18	17.27

[1] 10 or more facilities under same ownership.

NOTE: t-statistics are shown in parentheses.

SOURCE: The Urban Institute: Data from the Medicare Skilled Nursing Facility Study, 1983.

calculated for urban and rural facilities. Implementation of this new system will begin on October 1, 1986.

As with all reimbursement methodologies under Medicaid, States are quite free to establish their own payment systems. As a result, there is considerable variation in SNF reimbursement methods under Medicaid. In contrast to Medicare's retrospective reimbursement system, 37 States employ various forms of prospective payment, the most common of which is facility-specific rates trended forward by inflation. Only 10 States use retrospective systems similar to Medicare's. Three States use a method that combines various approaches.

The current retrospective, cost-based reimbursement system is widely believed to have deficiencies, including lack of incentives for efficiency, excessive reporting requirements, and financial uncertainty created by retroactive adjustments. The nursing home industry asserts that because of these deficiencies, many SNF's do not participate in the Medicare program, resulting in inadequate patient access and a backlog of hospital patients awaiting nursing home placement.

One of the main purposes of introducing hospital prospective payment into the Medicare program was to constrain the large annual increases in hospital expenditures. For example, Medicare hospital expenditures increased from $11.5 billion in 1975 to $40.4 billion in 1983. Most studies have found Medicaid nursing home prospective payment systems to be generally cost constraining, although certain retrospective cost systems can match the cost constraints in the prospective reimbursement approaches (Birnbaum et al., 1981; Buchanan, 1981; Holahan, Cohen, and Scanlon, 1982). Notwithstanding the fact the current retrospective, cost-based reimbursement system contains few incentives to restrain costs, expenditure increases for Medicare SNF's, as reported earlier, have been modest. Although it is difficult to impute casuality to this relatively modest rate of increase, the Medicare coverage requirements and the overwhelming dominance of Medicaid revenues for most nursing homes undoubtedly play some role.

SNF's are required to file detailed Medicare cost reports, developed for hospitals, although facilities with small Medicare case loads may file abbreviated cost reports. The required reporting of expenses on a cost-center basis (maintaining statistics for cost finding) and the time and expense of preparing the cost report may discourage facilities from participating in Medicare (Feder and Scanlon, 1981). The current burden of cost reporting associated with Medicare participation is disproportionate to the generally small Medicare market share. Although drastic reductions in reporting burden are possible under some prospective payment systems (e.g., flat- or class-rate systems), other prospective payment options (e.g., facility-specific rates trended forward by inflation) require substantial cost reporting.

An inevitable consequence of a retrospective, cost-based reimbursement system is that Medicare intermediaries disallow some costs months and, sometimes, even years after the close of the SNF's accounting period. Because Medicare reimburses only for actual cost incurred, there is no cushion against losses that occur when expenses are subsequently disallowed. Most disallowances, however, are small.

Prospective payment has also been advocated as a means to increase SNF participation in the Medicare program and thereby improve beneficiary access. Increased SNF participation could potentially increase the use of Medicare SNF services and decrease the number of hospital patients awaiting SNF placements.

The very great interstate variations in the use of Medicare SNF's, however, suggest that local or regional factors greatly influence access to Medicare SNF services. For example, States with Medicaid reimbursement systems provide strong incentives for nursing homes to become certified as intermediate care facilities (ICF's); these States tend to have nursing home industries that are predominantly ICF oriented. Because Medicare constitutes such a small share of the overall market, it has little leverage to affect the availability of SNF-level nursing home care.

Other local and regional factors that affect Medicare SNF participation and the use of Medicare SNF services are the following: variations in local medical practice patterns; the availability of home health services as an alternative to SNF care; and differences (in light of these local and regional factors) in the interpretation and application of coverage rules by Medicare fiscal intermediaries.

With respect to the problem of the backlog of hospital patients awaiting nursing home placement, existing evidence suggests that most are awaiting Medicaid, not Medicare, placements (Gruenberg and Willemain, 1982). However, the Medicare hospital PPS may cause an increase in the use of Medicare SNF services because PPS gives hospitals a strong financial incentive to discharge patients sooner. Thus, hospital prospective payment may increase demand for Medicare SNF care. It would, therefore, be desirable to have a payment system that encourages facilities to admit Medicare patients.

Case-mix measures

In a Medicare SNF prospective payment system, incorporating case-mix adjustments for different patient needs is critical to ensure equitable payment to providers and access by severely ill patients. Case-mix measurement is a generic term referring to many approaches for determining the amount of resources required by different patients. To the extent that individual patients require different amounts of resources, a prospective payment system for SNF's, like the one recently implemented for hospitals, should allow for differential payment rates based on patient needs. If prospective rates are set without regard to case-mix, providers could profit by admitting only patients with the lowest resource needs, thereby limiting access for more disabled patients. Providers targeting their services to the most disabled would be disadvataged rather than rewarded by such a system. Such a result would be undesirable from the perspective of patient access and provider equity.

Specific research on the case-mix of Medicare SNF patients is very limited, primarily because they make up such a small part of the nursing home population. The existing research on case mix and resource use in nursing homes has focused on the general, long-term nursing home population; thus, these results may not be directly applicable to Medicare SNF patients. This research indicates that limitations in activities of daily living (ADL) such as bathing, dressing, and feeding are most important in predicting resource consumption and related costs (Stassen and Bishop, 1983). Diagnosis is much less important.

Although prior nursing home research suggests that diagnosis per se is not a comprehensive measure of case mix, two factors make an additional assessment of this characteristic desirable. First, the Medicare SNF benefit was designed to function as a substitute for inpatient hospital care, and the Medicare SNF patient is expected to use nursing homes for short-term restorative care rather than for long-term care. Diagnosis may, therefore, be a better predictor of resource use among Medicare patients than among Medicaid or private pay patients who use nursing homes for long-term care. Second, diagnosis is the only patient characteristic other than age and sex that HCFA routinely collects. Hence, the feasibility, at this time, of incorporating case mix in a prospective payment system is largely determined by the utility of diagnosis as a case-mix measure.

Medicare program data on SNF diagnoses and their relationship to length of stay, Medicare payment per day, and charges per day are presented in Table 6. The large standard deviations in charge per day and reimbursement per day suggest that diagnoses are not good indicators of resource use. It is apparent that other factors, such as disability, are operating to affect the broad distributions of these variables. As a consequence, the incorporation of a diagnosis-based case-mix adjustment in a PPS for Medicare SNF's appears to be impractical.

In the absence of sufficient data to derive a direct patient-specific case-mix measure for Medicare SNF patients, an evaluation of existing facility data that might provide a proxy case-mix measure, based on facility characteristics, was undertaken. As shown on Table 5, the percentage of Medicare days is directly related to cost and could be used as a proxy case-mix measure. A 1-percent point increase in the proportion of Medicare days in a facility increased the per diem routine operating costs by 30 cents in 1980. The percentage of Medicare days measures the extent to which facilities provide care to short-term skilled and rehabilitative patients rather than to long-term care patients. This finding is consistent with other analyses that indicate that Medicare patients have, on average, more frequent and severe medically oriented problems (Shaughnessy, Kramer, and Schlenker, 1983a; Shaughnessy, Schlenker, and Kramer, 1983b; Sulvetta and Holahan, 1984). Thus, while not as powerful a case-mix measure as DRG's for hospitals, the percentage of Medicare days could be used as a limited proxy case-mix measure until sufficient data are collected and anlyzed to develop a direct patient-specific case-mix measure.

Hospital-based and freestanding facilities

The substantially higher costs of hospital-based facilities has been an area of policy importance in the last several years as Congress and the Reagan administration have sought to make Medicare a "prudent buyer." If hospital-based facilities do not serve the more disabled patients or provide higher quality care, then the cost differential is not justified and should not be recognized by Medicare.

The average costs for hospital-based and freestanding SNF's by major cost categories are presented in Table 4. In 1983, the total estimated cost per diem of hospital-based SNF's ($131) was twice as high as that of freestanding facilities ($67). This

Table 6

Medicare skilled nursing facility admissions, length of stay, charges, and reimbursements, by most prevalent diagnoses: Calendar year 1980

Diagnosis	ICD-9-CM[1]	Percent of admissions	Length of stay in days	Average charge per day	Average reimbursement per day[2]
Total		100.0	29	$74	$42
		[3](278,849)	(26)	(45)	(33)
Cerebrovascular disease	436x	13.4	35	76	41
			(29)	(43)	(28)
Unspecified part of neck of femur, closed	8208	11.9	34	73	42
			(25)	(39)	(30)
Congestive heart failure	4280	3.6	22	70	41
			(22)	(44)	(28)
Coronary artherosclerosis	4140	2.7	26	64	36
			(25)	(33)	(23)
Diabetes mellitus	2500	2.0	31	67	37
			(28)	(42)	(73)
Pneumonia	486x	1.8	23	66	37
			(23)	(42)	(29)
Petrochaneteric fracture closed	8202	1.6	36	72	41
			(26)	(36)	(27)
Chronic airway obstruction	496x	1.5	23	79	42
			(23)	(55)	(29)
Shaft or unspecified part, closed	8210	1.4	37	75	42
			(27)	(40)	(30)
Urinary tract infection	5990	1.2	26	58	34
			(25)	(28)	(26)
Mental disorders following brain damage	3109	1.2	29	60	33
			(28)	(33)	(23)
Malignant neoplasm of bronchus and lung	1629	1.1	22	74	44
			(22)	(50)	(27)
Deformities of other parts of limbs	7368	1.1	38	79	48
			(29)	(49)	(37)
Decubitus ulcer	7070	1.1	43	75	41
			(33)	(49)	(28)
Unspecified orthopedic aftercare	v549	1.0	35	80	47
			(27)	(42)	(35)
Osteoarthrosis	7159	0.8	23	91	54
			(21)	(51)	(39)
Unknown	7999	2.7	17	87	56
			(16)	(59)	(38)
All others		49.1	27	74	43
			(25)	(47)	(34)

[1] *International Classification of Diseases, 9th Revision, Clinical Modification.*
[2] Does not include beneficiary cost sharing.
[3] Number of admissions.

NOTE: Standard deviations are shown in parentheses.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data from the Medicare Statistical System.

two-to-one ratio is recorded for almost all cost categories. Hospital-based and freestanding SNF's in rural areas are more similar in cost structure than they are in urban areas (not on table).

Believing the cost differential to be unjustified, TEFRA mandated that Medicare pay no more for SNF care to hospitals than would be paid using only the cost experience of the presumably more efficient freestanding facilities. These single limits had a major impact on hospital-based facilities, reducing estimated fiscal year 1983 Medicare revenues by 36 percent. It is estimated that 84 percent of hospital-based facilities exceeded the single limits.

Concerned that these reimbursement reductions for hospital-based facilities might adversely affect access by Medicare beneficiaries and the financial health of some hospitals, Congress twice retroactively postponed the effective date of these cost limits. More recently, the Deficit Reduction Act of 1984 formally rejected the concept of single limits and established a new, somewhat more generous system of cost limits for hospitals. These new SNF limits lessen the impact on hospitals, but do not take into account all of the cost differences as justifiable. The SNF limits in the Deficit Reduction Act reduce estimated fiscal year 1983 hospital-based SNF Medicare revenues by 22 percent, with 52 percent of all facilities exceeding the cost limits.

Sufficient information is currently not available to definitively quantify the proportion of the cost differences that can be attributed to the various factors such as unmeasured case mix, quality of care, and inefficiency. The bulk of the evidence, however, suggests that there are some case-mix differences between hospital-based and freestanding facilities, with hospital-based facilities caring for more disabled patients.

The percentage of Medicare days, a proxy measure for case mix, is associated with higher costs; on average, hospital-based SNF's have twice the percentage of Medicare days as do freestanding SNF's. Medicare program data on staffing patterns indicate that hospital-based SNF's have more nursing hours, more licensed nurses, and more rehabilitation therapists than freestanding SNF's, suggesting case-mix differences between the two types of facilities.

Shaughnessy, Kramer, and Schlenker (1983a,b) studied patients in high Medicare utilization SNF's and found hospital-based patients to be characterized by more severe medical problems (e.g., recovery from surgery, shortness of breath, intravenous catheters). Patients in freestanding SNF's tended to have more mental status problems, terminal illness, and urinary tract infections. An analysis of case mix, using data from the Medicare and Medicaid Automated Certification System, found that higher proportions of patients in hospital-based SNF's compared with those in freestanding SNF's had disability problems and needed specialized services (Sulvetta and Holahan, 1984). Three studies of mostly low Medicare utilization facilities found differences in the case mix of hospital-based and freestanding SNF's, with most of the evidence pointing toward greater severity of illness and disability in hospital-based patients (Cameron and Knauf, 1982; Sulvetta and Holahan, 1984; Shaughnessy, Schlenker, and Yslas, 1982). Mor and Sherwood (1983) found virtually no differences in Medicare diagnoses and disabilities between hospital-based and freestanding facilities in Oregon; they found slight differences in Massachusetts. In both States, hospital-based patients tended to be more rehabilitation oriented.

Conclusions

In designing a Medicare prospective payment system for SNF's, three major factors must be considered. First, the key to the development of the Medicare hospital PPS is the existence of a valid and reliable patient-specific measure of resource utilization, i.e., diagnosis-related groups. Without a case-mix adjustment, hospitals caring for more disabled patients who require more costly care would be financially disadvantaged and access for such patients would be impaired. The same dynamics would also exist for SNF's.

Unfortunately, no reliable and valid patient-specific case-mix measure analogous to DRG's exists for Medicare SNF patients. Proxy measures of case mix, e.g., percentage of Medicare days, have been found to be related to cost, but they are far less powerful than DRG's in accounting for variations in resource utilization.

Second, the Medicare hospital PPS will change the incentives for acute care institutions; this may, in turn, affect Medicare SNF's. Because hospital payment is now on a per case basis rather than a per diem basis, hospitals will have incentives to keep patients in acute care settings only as long as is medically necessary. Thus, some observers predict that hospitals will discharge more patients to Medicare SNF's. Similarly, hospitals may discharge sicker and more disabled patients to SNF's, patients that previously might have been retained in acute care settings. Thus, the historical experience of the Medicare SNF benefit and of the SNF's participating in it may not be a good predictor of future utilization, cost, or case mix.

Third, Medicaid, not Medicare, dominates the nursing home industry. Although there are some SNF's that are heavily dependent on Medicare revenues and are important to the Medicare program, these SNF's are a small minority of nursing homes. Thus, unlike hospitals where Medicare has a large market share in virtually all facilities, Medicare SNF prospective payment is likely to have only a modest impact on nursing home behavior.

In conclusion, prospective payment for skilled nursing facilities is an option for reimbursement reform that Congress will be considering as part of its continuing effort to restructure Medicare reimbursement. Care must be taken, however, to tailor any SNF reimbursement system to the unique characteristics of the nursing home industry and the role of Medicare in it.

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