Medicaid payment policies for nursing home care: A national survey

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This research gives a comprehensive overview of the nursing home payment methodologies used by each State Medicaid program. To present this comprehensive overview, 1988 data were collected by survey from 49 States and the District of Columbia. The literature was reviewed and integrated into the study to provide a theoretical framework to analyze the collected data. The data are organized and presented as follows: payment levels, payment methods, payment of capital-related costs, and incentives in nursing home payment. We conclude with a discussion of the impact these different methodologies have on program cost containment, quality, and recipient access.

Introduction

During 1990, an estimated $54.5 billion, or 8.4 percent of total national health expenditures, was spent on nursing home care in the United States (Division of National Cost Estimates, 1987). Dissecting this total expenditure of $54.5 billion, $28 billion (or 51.3 percent) came from the patients or their families as direct private payments, and $22.1 billion (or 40.6 percent) came from the State Medicaid programs. Private health insurance and the Medicare program combined paid less than 3 percent of the Nation's 1990 nursing home bill. Without question, Medicaid programs are the largest third-party payers of nursing home care in the United States. Although Medicaid programs provided over 40 percent of the Nation's nursing home expenditures in 1990, Medicaid payments can contribute a significantly larger percentage of revenues to individual nursing home providers. For example, during 1988, Medicaid payments amounted to 61 percent of the revenues of Beverly Enterprises, the largest nursing home chain in the United States (Standard and Poor's, 1989). Medicaid payment rates, policies, and coverage have a major impact on the nursing home care provided in this country.

Payment trends

Medicaid payment policy for nursing home care has continuously evolved since the program was initiated in 1965. The original Medicaid statute did not specify a payment methodology for the programs to use to pay for nursing home care. States were free to design and implement their own methodologies, within the Federal mandate that payments should not "exceed reasonable charges consistent with efficiency, economy, and quality of care" (Commerce Clearing House, 1981). Congress became concerned in the early 1970s that the lack of uniformity in Medicaid payment policies could result in some States paying too much for care and other States paying too little to allow the delivery of good quality care. In 1972, Congress amended the Social Security Act to require that effective July 1, 1976, all State Medicaid programs must pay nursing homes on a reasonable cost-related basis (Public Law 92-603, section 249).

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This law, however, was viewed by many State programs not only as inflationary but also as restricting their ability to develop payment systems that would encourage provider efficiency (Buchanan, 1987). The Omnibus Reconciliation Act of 1980 (Public Law 96-499) eliminated the Federal mandate that required States to use reasonable cost-related payment for nursing home care. This legislation allowed the Medicaid programs to develop less costly methodologies, with the Federal requirement that these new plans must be "reasonable and adequate" to pay the costs of an efficiently administered nursing home complying with Federal and State quality and safety standards. In June 1990, the U.S. Supreme Court ruled that hospitals and nursing homes may sue States in Federal court to guarantee reasonable and adequate Medicaid payment (Greenhouse, 1990). Although a financial victory for the providers of care to Medicaid recipients, this ruling will enhance the fiscal strains facing most Medicaid programs.

Focusing on specific components of Medicaid payment methodologies for nursing home care, a number of trends have emerged since the program's inception. In an effort to contain program expenditures, one major trend has been towards the use of prospective ratesetting rather than cost-based, retrospective payment systems. At least 21 States used a form of retrospective payment for skilled care, and at least 17 used retrospective payments for intermediate care during 1975 (Buchanan, 1987). By 1988, as few as nine programs used a form of retrospective ratesetting.

An emerging trend in capital-cost payment has been the adoption of a fair-rental system by many Medicaid programs (Grimaldi and Jazwiecki, 1987). A fair-rental system pays an imputed rent to nursing homes for the residential-related services provided to Medicaid patients. These fair-rental systems are intended to overcome the inflationary incentives of cost-based payment of property-related expenses.

Another major trend in Medicaid payment for nursing home care that is currently emerging is case-mix payment systems. Flat-rate and prospective payment systems discourage nursing homes from accepting Medicaid patients with heavy-care needs, because the level of Medicaid payment does not increase as care needs increase. A case-mix payment system adjusts the Medicaid payment to reflect the patients' care needs (Adams and Schlenker, 1986; Nyman, Levey, and Rohrer, 1987; Cameron, 1985). Preliminary results of a

survey of the Medicaid programs indicate that as many as 19 States were using some form of case-mix payment during March 1990.[1]

Diversity of payment methodologies

Each State has flexibility in establishing its own payment methodologies and in calculating payment rates for nursing home care (U.S. General Accounting Office, 1983). Public Law 96-499, section 962, requires only that Medicaid payments for nursing home care must be "reasonable and adequate to meet the costs which must be incurred by efficiently and economically operated facilities" complying with Federal and State quality and safety standards. Within this broad "reasonable and adequate" Federal standard, each State sets its own payment rates and determines how these payments may be limited, which costs are allowable, how property-related expenses are paid, and if the payment system includes any incentives. As a result, each State has developed a unique payment system, with many payment-related variables, to pay for the nursing home care Medicaid recipients receive.

Given this diversity among the States, and the range of payment and cost-related factors to be studied, there is a large body of literature on issues relating to nursing home costs and Medicaid payment of these costs. Many studies, particularly in the early 1980s, focused on analyses of variances in nursing home costs among facilities. For example, a 1980 study reviewed previous research focusing on nursing home costs, concluding that provider and service characteristics are associated with differences in the average cost of care (Bishop, 1980). A 1981 study analyzed the determinants of nursing home operating costs and concluded that facility characteristics, particularly facility type and ownership, were important variables explaining cost variation. Non-profit nursing homes had higher costs than profit-seeking facilities (Birnbaum et al., 1981a). This same research concluded that private-pay patients subsidize the cost of care received by Medicaid patients. In a 1983 study of nursing home operating costs in New York State, the authors concluded that type of ownership was among the most significant and important variable in explaining operating cost variation (Lee and Birnbaum, 1983).

A 1982 study analyzed nursing home costs using data from the 1973-1974 National Nursing Home Survey (Meiners, 1982). This study concluded that economies of scale exist in the delivery of nursing home care and that the profit motive is an important incentive for cost containment. In addition, this study expanded on these cost analyses to look at the impact Medicare and Medicaid payment policies had on the costs of care. The major conclusion was that flat-rate and prospective-rate systems were associated with significantly lower costs of care compared with cost-based systems and to the incentives of private financing.

[1] In a survey separate from this study, completed in March 1990, the first author asked the Medicaid programs about the use of case-mix payment and the access Medicaid recipients have to care.

Other studies moved away from general analyses of factors affecting variations in operating cost among nursing homes to focus on the impact specific Medicaid policies have on nursing home payment. A 1988 study analyzed the impact forms of prospective and retrospective payment had on Medicaid payment rates between 1978 and 1986, concluding that States using prospective-class payment had significantly lower payments for 1982 through 1986 (Swan, Harrington, and Grant, 1988). Other studies have confirmed this association of prospective-payment methods with lower Medicaid payments for nursing home care (Buchanan, 1983; Buchanan, 1987). Additional studies evaluated approaches to the payment of the capital-related costs of providing nursing home care (Cohen and Holahan, 1986; Baldwin and Bishop, 1984). Other studies have addressed a broader range of issues relating to Medicaid payment for nursing home care, but a limited number of States for case studies were used (Holahan and Cohen, 1987; Holahan, 1985). The purpose of this article is to address a broad range of issues relating to nursing home payments, giving a comprehensive overview of the payment systems used by each State.

Data collection

To obtain information on the Medicaid payment systems used to pay for nursing home care, the States were surveyed by mail beginning August 1988. The survey instrument contained 30 questions relating to Medicaid payments, payment methodologies, allowable costs, capital-related expenses, and incentives. By February 1989, 46 States had completed the questionnaire. Summary tables were prepared, based on these responses, and mailed back to the States in May 1989 (including those not responding) for verification, corrections, and updates. After additional mailings to States not responding to the survey, 49 States and the District of Columbia participated in the study and provided the requested data.

Prior to January 1, 1989, the Arizona Long-Term Care System (ALTCS) provided long-term care services to recipients through program contractors, who received a capitation payment for the provision and coordination of all institutional and non-institutional long-term care. Most nursing home payments were made by these program contractors and not by ALTCS directly. Because the Arizona Medicaid program did not directly pay for nursing home care during 1988, it is not included in this study.

These data are organized and presented as follows: payment levels, payment methods, payment of capital-related costs, and incentives in nursing home payment. In addition to the narrative, tables are presented that summarize the responses to the survey.

Payment levels

This section of the questionnaire requested information from the States on various aspects of 1988 and 1987 per diem payments for care provided by skilled nursing facilities (SNFs) and intermediate care facilities (ICFs). Table 1 summarizes these payment-rate-related responses.

Payments

During the survey, the Medicaid programs were asked to list average per diem payments for the care Medicaid patients received at SNFs and ICFs.[2] The average per diem payment for skilled care was $60.65 per day during 1988 and $58.24 per day during 1987 for the 47 States supplying data. The 1988 average per diem payment for skilled care represented an increase of only 4.14 percent over the average per diem payment for 1987. The average per diem payment for intermediate care was $46.03 per day in 1988 and $44.64 per day in 1987, representing an increase of only 3.11 percent. As Table 1 illustrates, during 1988, 10 programs used the same level of payment to pay both SNFs and ICFs.

The average Medicaid per diem payments for skilled care and intermediate care presented in Table 1 document wide differences among the States. The lowest average per diem payment for skilled care during 1988 was $33.72 per day for Arkansas, compared with the highest average payment of $176.29 per day for Alaska. The 1988 average per diem payment for skilled care in California was only $50.14, but for neighboring Nevada and Oregon, it was $64.50 and $69.62 per day, respectively. Another example of differences in payment amounts among contiguous States is that of Illinois, with an average per diem payment of only $46.35 during 1988, and Indiana and Iowa, with average per diem payments of $61.01 and $76.18 per day, respectively. The different payment methodologies used by the Medicaid programs to calculate payments to nursing homes can explain some of this variation in payment levels among the States (Swan, Harrington, and Grant, 1988; Holahan and Cohen, 1987; Holahan, 1985). The earlier studies focusing on variations in operating costs among nursing homes also found that the level of input prices affected levels of operating costs (Birnbaum et al., 1981a). In another study, Buchanan (1987) discovered that differences in the cost of providing care in the States (measured by nursing home wage rates) explained much of these Medicaid payment variations. He also found that political ideology was associated with the level of Medicaid payments for skilled care and intermediate care, with the more conservative States having lower payments than the more liberal ones.

Percent patient days

Although each Medicaid program pays for care provided by both SNFs and ICFs, the placement of Medicaid patients in these two types of nursing home care varies widely among the States. Table 1 presents the number of Medicaid patient days in SNFs as a percent of total Medicaid nursing home days (Medicaid paid days in SNFs plus Medicaid paid days in ICFs) for each State during 1987. In California, SNFs were paid for more than 95 percent of the total Medi-Cal patient days in nursing homes during 1987. In contrast, SNFs were paid for only about one-tenth of 1 percent of total Medicaid nursing home days in New Hampshire during 1987. For the 48 States and the District of Columbia with available data, SNFs were paid for an average of 23.65 percent of the total Medicaid nursing home days.

These disparities among the States in SNF and ICF utilization levels by Medicaid recipients raise questions about the meaning of these SNF and ICF definitions across States. As a result, many States are paying both SNFs and ICFs for care provided to Medicaid recipients with the same payment level (Table 1). The SNF and ICF utilization disparities among States also raise questions about the appropriateness of the level of nursing home care many Medicaid recipients receive across States. Do the health conditions of Medicaid recipients in Arkansas, California, Connecticut, New York, and Wisconsin differ enough from the conditions of Medicaid patients in Iowa, Kansas, Louisiana, Montana, New Hampshire, and Alabama to justify the sharply different utilization rates of care provided by SNFs?

Private pay difference

Differences exist in the levels of payment by private patients and by the Medicaid programs for nursing home care. For example, studies have concluded that private patients, with their higher payments, subsidize the cost of care provided to Medicaid patients (Birnbaum et al., 1981a; Arling, Nordquist, and Capitman, 1987). To address this issue, respondents to the 1988 survey were asked to estimate the difference between the private payment and the Medicaid payment for both skilled care and intermediate care in their State during 1987. The questionnaire provided a series of dollar ranges (i.e., "$1.00-$5.00," "$6.00-$10.00," "$11.00-$15.00," $16.00-$20.00," "$21.00-$25.00," "over $25.00," and "No difference") to assist the Medicaid programs in estimating these differences.

The responses indicate that large differences exist in most States between the per diem payments made by the Medicaid programs and those made by private patients. Table 1 presents the responses from the 45 States providing estimates. To calculate an average difference between private payments and Medicaid payments for skilled care and intermediate care for all States providing estimates, the midpoint of the selected dollar range (i.e., $3.00 for the $1.00-$5.00 range) was assigned to each State in the calculation of the mean. The average estimate of the difference between the level of payment from private patients and from the Medicaid programs was $11.98 per day for skilled care and $10.19 per day for intermediate care during 1987.

To gain additional perspectives on the differences between private payments and Medicaid payments for nursing home care, this same question was asked of the State affiliates of the American Health Care Association. Thirty-two of these State nursing home affiliates replied with usable data for 1987. The Medicaid programs in

[2]The questionnaire asked the State programs for the "average Medicaid per diem payment." The survey did not ask the average per diem rate that nursing homes were allowed to bill under Medicaid. The Medicaid recipient may have to pay a portion of the per diem rate, depending on income and whether a spouse remains in the community.

Table 1

Average Medicaid per diem payments for nursing home care, by State and type of care

State	SNF payments per day		ICF payments per day		1987 percent SNF of total patient days	1987 estimate of per diem private pay difference		1987 per diem capital component	
	1988	1987	1988	1987		SNF	ICF	SNF	ICF
Alabama	$48.10	$46.91	$33.10	$31.98	*8.150	$6.00–$10.00	$6.00–$10.00	NA	NA
Alaska	176.29 SNF and ICF	162.57 SNF and ICF	—	—	*56.697	11.00– 15.00	NA	NA	NA
Arkansas	33.72 SNF and ICF	31.38 SNF and ICF	32.02	29.88	73.313	11.00– 15.00	11.00– 15.00	$1.43	$1.22
California	50.14	47.80	38.50	38.20	95.452	16.00– 20.00	16.00– 20.00	±10%	±10%
Colorado	49.10	46.34	49.10	46.34	*2.532	Over 25.00	Over 25.00	6.24	6.24
Connecticut	83.86 (median)	74.34 (median)	64.18 (median)	57.18 (median)	79.059	16.00– 20.00	11.00– 15.00	$10.00–$15.00 (estimate)	$10.00–$15.00 (estimate)
Delaware	71.83	67.76	71.83	67.76	*8.663	16.00– 20.00	16.00– 20.00	4.08	4.08
District of Columbia	NA	NA	NA	NA	4.205	NA	NA	NA	NA
Florida	56.97	53.46	56.97	53.46	14.675	6.00– 10.00	6.00– 10.00	7.01	7.01
Georgia	56.74	NA	33.37	NA	*29.592	6.00– 10.00	1.00– 5.00	4.03	3.22
Hawaii	107.54	105.66	86.60	86.51	25.160	1.00– 5.00	11.00– 15.00	9.54	8.32
Idaho	49.51	47.20	49.69	47.33	26.172	6.00- 10.00	6.00– 10.00	5.24	5.24
Illinois	46.35	NA	36.88	NA	13.935	NA	NA	4.40	4.40
Indiana	61.01	59.39	49.33	48.28	19.493	6.00– 10.00	6.00– 10.00	8.05	7.05
Iowa	76.18	72.90	33.82	31.90	0.828	No difference	6.00– 10.00	NA	3.58
Kansas	44.93	40.70	36.84	33.55	1.749	6.00– 10.00	6.00– 10.00	4.86	3.75
Kentucky	51.58	48.97	36.31	44.21	12.164	6.00– 10.00	11.00– 15.00	5.33	4.47
Louisiana	42.62	40.80	35.91	34.45	*1.792	11.00– 15.00	11.00– 15.00	7.57	5.11
Maine	85.45	81.39	56.74	51.81	3.887	11.00– 15.00	6.00– 10.00	9.45	8.35
Maryland	57.57	57.57	57.57	57.57	3.868	11.00– 15.00	11.00– 15.00	8.65	8.65
Massachusetts	71.82	64.94	49.63	44.37	*41.390	Over 25.00	11.00– 15.00	5.09	3.15
Michigan	47.99	46.01	47.99	46.01	23.028	11.00– 15.00	6.00– 10.00	5.52	5.52
Minnesota	61.04	55.76	61.04	55.76	NA	No difference	No difference	4.54	4.54
Mississippi	39.09	37.63	33.60	31.81	44.091	6.00– 10.00	11.00– 15.00	6.27	6.27
Missouri	45.86	44.75	36.60	36.08	3.128	1.00– 5.00	1.00– 5.00	NA	NA
Montana	49.21	48.24	49.21	48.24	*1.963	16.00– 20.00	6.00– 10.00	4.94	4.94
Nebraska	55.84 (rate)	52.98 (rate)	34.95 (rate)	32.65 (rate)	8.496	6.00– 10.00	1.00– 5.00	5.25	3.00
Nevada	64.50	63.14	I–38.57 II–49.41	I–36.35 II–47.21	8.055	6.00– 10.00	11.00– 15.00	5.81	5.54
New Hampshire	NA	62.89	NA	57.66	0.111	Over 25.00	11.00– 15.00	7.50	4.25
New Jersey	69.81	66.19	63.47	58.47	10.689	NA	NA	NA	NA
New Mexico	88.14	91.37	49.60	48.23	*3.847	6.00– 10.00	6.00– 10.00	6.63	6.63

See footnotes at end of table.

Table 1—Continued

Average Medicaid per diem payments for nursing home care, by State and type of care

State	SNF payments per day		ICF payments per day		1987 percent SNF of total patient days	1987 estimate of per diem private pay difference		1987 per diem capital component	
	1988	1987	1988	1987		SNF	ICF	SNF	ICF
New York	$92.86	$88.40	$63.35 (HRF)	$59.92 (HRF)	76.760	NA	NA	$6.10	$7.00 (HRF)
North Carolina	47.14	45.66	31.83	30.85	43.548	6.00– 10.00	11.00– 15.00	NA	NA
North Dakota	51.58	50.28	40.31	39.07	51.654	6.00– 10.00	6.00– 10.00	3.92	3.13
Ohio	59.46	55.42	52.46	48.02	62.790	11.00– 15.00	6.00– 10.00	3.85	3.00
Oklahoma	50.60	42.17	III–31.53 I–23.59	III–28.49 I–22.87	0.407	1.00– 5.00	1.00– 5.00	4.74	4.74
Oregon	69.62	66.72	49.26	44.24	3.499	11.00– 15.00	6.00– 10.00	5.58	5.35
Pennsylvania	53.87	48.57	42.49	38.75	11.415	11.00– 15.00	11.00– 15.00	5.46	5.15
Rhode Island	62.80	58.85	57.20	53.20	3.458	NA	NA	6.15	2.45
South Carolina	49.77	46.23	35.43	33.71	*44.944	11.00– 15.00	11.00– 15.00	3.59	3.59
South Dakota	42.23	40.76	32.01	30.84	3.351	6.00– 10.00	6.00– 10.00	NA	NA
Tennessee	58.33	55.80	37.41	35.80	7.981	11.00– 15.00	6.00– 10.00	NA	NA
Texas	49.93	47.72	35.14	33.24	7.617	6.00– 10.00	6.00– 10.00	7.23	7.23
Utah	51.21	50.95	42.65	42.35	4.172	1.00– 5.00	1.00– 5.00	3.21	3.21
Vermont	57.24	55.81	53.15	51.79	1.407	11.00– 15.00	11.00– 15.00	4.72	4.45
Virginia	NA	66.54	NA	48.14	4.978	21.00– 25.00	11.00– 15.00	8.80	8.26
Washington	54.33	48.49	54.33	48.49	58.898	6.00– 10.00	6.00– 10.00	5.79	5.79
West Virginia	53.75	51.16	50.00	46.56	*39.403	21.00– 25.00	11.00– 15.00	10.75	9.50
Wisconsin	51.78	48.80	39.41	39.38	95.061	16.00– 20.00	6.00– 10.00	4.63	4.44
Wyoming	51.14 SNF and ICF	50.05 SNF and ICF	—	—	*11.151	6.00– 10.00 SNF and ICF	—	3.80 SNF and ICF	—
Average of all responses	$60.65 (47)	$58.24 (47)	$46.03 (45)	$44.64 (45)	23.65 (49)	$11.98 (43)	$10.19 (42)	$5.95 (41)	$5.33 (41)

NOTES: SNF is skilled nursing facility; ICF is intermediate care facility; NA is not available; HRF is health-related facility. I, II, and III are ICF classes.

SOURCE: 1987 percent SNF of total patient days preceded by an asterisk are based on data from Health Care Financing Administration: Bureau of Data Management and Strategy, Office of Statistics and Data Management, Division of Medicaid Statistics; rest of data in table from Buchanan, R.J.: 1988 Medicaid Nursing Home Reimbursement Survey.

four of these States did not respond to this question, allowing comparisons of these estimates of payment differences between the Medicaid programs and the State nursing home affiliates in 28 States. The estimates of the differences between private payments and Medicaid payments made by the State affiliates and the Medicaid programs were remarkably similar for 1987. In 10 States, the estimates made by the Medicaid programs of the differences between Medicaid payments and private payments were identical to those made by the nursing home affiliates for both skilled care and intermediate care. In an additional six States, the Medicaid estimates of payment differences were the same as those of the State affiliates for either SNF care or ICF care, but not for both types of care. In eight States, the Medicaid estimates of differences between Medicaid payments and private payments were lower than the estimates of the affiliates for both skilled care and intermediate care. In four other States, the estimates of the Medicaid program were higher than those of the affiliates for both skilled care and intermediate care. In these 28 States, with estimates from both the Medicaid programs and the State nursing home affiliates of the differences between Medicaid payments and private payments, the average estimate from the Medicaid programs of the 1987 payment difference to SNFs was $11.41 per day, compared with the average estimate of $11.78 per day made by nursing home associations. The Medicaid programs estimated an average payment difference of $10.19 per day to ICFs in 1987, compared with an average estimate of $10.00 made by the nursing home affiliates.

Note that the Minnesota Medicaid program responded that "No difference" exists between the Medicaid level of payment and the rate charged to private-care patients for either skilled care or intermediate care. In Minnesota, by State law, the rate charged to private-pay patients cannot exceed the Medicaid level of payment for nursing home care. Equalization laws are an effective policy approach to the elimination of cross-subsidization. However, if the Medicaid level of payment is inadequate, then the range and quality of services all nursing home residents receive, not just Medicaid patients, would decline in a State using this equalization approach.

Capital component

Capital-related expenses are a significant component of total nursing home costs. Studies have projected these costs of depreciation, leases, and interest expenses at 13-15 percent of total costs of care (Grimaldi, 1982; Birnbaum et al., 1981b; Cohen and Holahan, 1986).

During the 1988 survey of Medicaid programs, States were asked to provide the average Medicaid payment for the property component of payment for both skilled care and intermediate care during 1987. The responses are presented in Table 1. For the States reporting these data, the average payment for capital-related costs during 1987 was $5.95 per day for skilled care and $5.33 per day for intermediate care.[3] Comparing these average payments for property-related costs with the total average per diem payment for care demonstrates that Medicaid payment of capital expenses averaged 10.2 percent of the 1987 Medicaid payment for skilled care and 11.9 percent of the 1987 Medicaid payment for intermediate care. However, studies have put these costs of depreciation, leases, and interest expenses at 13-15 percent of care. This indicates that, typically, levels of Medicaid payment for nursing home care, especially skilled care, do not adequately reflect the capital costs of providing this care.

[3]These calculations include $12.50 per day for SNFs and ICFs in Connecticut, which are the midpoints of the estimates received from the Connecticut Medicaid program. The calculations also include $4.78 for SNFs and $3.82 for ICFs, which are 10 percent of the 1987 per diem payments by the Medi-Cal program for skilled and intermediate care.

Medicaid payment methods

States were asked about the various payment policies and mechanisms used during 1988 to calculate payments for care provided by SNFs and ICFs. These payment-method-related responses are summarized in Table 2.

Payment limiting method

The Medicaid programs can use a variety of methods to limit payments to nursing homes (Holahan, 1985; Holahan and Cohen, 1987; Swan, Harrington and Grant, 1988; Buchanan, 1987). Typically, the establishment of payment ceilings involves categorizing nursing homes into homogeneous groups by level of care, size, geographic location, etc. The theory is that nursing homes grouped together with these similar characteristics will provide similar services and have similar cost structures. The payment limit for these homogeneous nursing home groups can then be set using either percentiles or some function of the mean or median cost of the group (e.g., 115 percent of the group mean). The selection of higher percentiles or percents by the Medicaid programs to limit payments allows the payment system to recognize wider variation in payable costs among nursing homes. The lower the percentile or percents selected to limit payments is, the greater is the number of facilities with costs above the payment ceiling or limit.

The Medicaid programs can elect to set one payment limit for the entire range of nursing home costs or to set different payment limits for different cost centers. To protect the quality of care, higher percentiles or percents (hence higher payment limits) can be applied to cost centers relating directly to the quality of care such as nursing care. To contain Medicaid expenditures, lower percentiles and percents can be applied to cost centers not directly affecting the quality of care such as administration or housekeeping (Holahan and Cohen, 1987). When Medicaid programs set one payment limit on the range of nursing home costs, the providers have more flexibility to react to the limit. The nursing home can offset high expenses in one cost center by reducing expenditures in another. In contrast, the use of different payment limits for different cost centers allows the Medicaid program greater control over resource use within the nursing home. The Medicaid programs can encourage resource use within some aspects of nursing home care by allowing higher limits for these cost centers. Conversely, the Medicaid programs can discourage expenditures for other aspects of care by setting lower limits for these cost centers (Holahan, 1985).

Table 2

Medicaid payment methods for nursing home care, by State and type of method: 1988

State	Payment method			Operating increases[1]		Allowable cost index
	Payment-limiting[1]	Prospective or retrospective[1]	Operating cost-increase[1]	Care-related (Date)	Other (Date)	
Alabama	C (60th)	Prospective	2 DRI-SNF market basket	2.56% 10/1/87	2.56% 10/1/87	81
Alaska	A-routine portion only	Prospective, with later adjustment	2	4.70% 7/1/88	4.70% 7/1/88	154
Arkansas	D	Prospective	3 CPI-related	No response	No response	121
California	Median	Prospective	NA	NA	NA	117
Colorado	C-Administrative 85th Health 90th	Prospective	1	3.93% 7/1/88	3.93% 7/1/88	142
Connecticut	B 150%	Prospective	3 GNP	NA	NA	107
Delaware	C 75th	Retrospective, with ceiling	1	7.00% 10/1/88	6.00% 10/1/88	123
District of Columbia	NA	NA	1	Varies with facility's fiscal year	Varies with facility's fiscal year	150
Florida	D	Prospective, with later adjustment	2	6.81% July 88	6.81% July 88	120
Georgia	C 90th	Prospective	3 Annual cost report	6.00% 4/1/88	6.00% 4/1/88	180
Hawaii	B 110-125%	Prospective, with later adjustment	2	3.70% 7/1/88	3.70% 7/1/88	161
Idaho	C 75th or 80th	Retrospective, with ceiling	2	4.10% 8/1/88	4.10% 8/1/88	114
Illinois	C 65th	Prospective	2	Varies with cost reporting periods	Varies with cost reporting periods	133
Indiana	C, D 90th	Prospective	3-GNP price deflator	2.90% 10/1/88	2.90% 10/1/88	121
Iowa	SNF-C, 60th ICF-C, 64th	Prospective	SNF-2 ICF-3 (Iowa-specific)	SNF-4.0% ICF-.01%	SNF-4.0% ICF-.01%	123
Kansas	C-varies with cost center	Prospective	1	3.60% 10/1/87	3.60% 10/1/87	129
Kentucky	B 102%	Prospective	2 DRI-SNF market basket	NA	NA	124
Louisiana	C 60th	Prospective	1	4.00% July 88	4.00% July 88	80
Maine	D	SNF-Retrospective ICF-Prospective	2 DRI-SNF market basket	SNF-retrospective ICF-4.3%	SNF-retrospective ICF-4.3%	99
Maryland	B-varies with cost center	Prospective and retrospective, with ceiling	2	NA	NA	155
Massachusetts	B-1 standard deviation over mean	Retrospective, with ceiling	3-Based on wages from facilities	14.71% (2-year rate)	14.71% (2-year rate)	79
Michigan	C 80th	Prospective	2	6.78% 9/87-8/31/89	6.78% 9/87-8/31/89	NA
Minnesota	B 125%, 110%	Prospective	1	7.80% 7/1/88	7.20% 7/1/88	74
Mississippi	C 60th	Prospective	2	4.16% 7/1/88	4.16% 7/1/88	130
Missouri	B 125%	Prospective	Negotiated rate	2% 7/1/87	2% 7/1/87	144
Montana	D-indexed cap from base period	Prospective	3-Estimated cost increases for State	2.45% 7/1/88	2.45% 7/1/88	113
Nebraska	B 110%	Prospective	Not updated each year with uniform %	Not applicable	Not applicable	131
Nevada	C 60th	Prospective	1	4.02% 7/1/88	4.02% 7/1/88	69
New Hampshire	SNF-Medicare ICF-C; 75th	SNF-retrospective, with ceiling; ICF-prospective	SNF-None ICF-1	ICF-6.0% 10/1/88	ICF-6.0% 10/1/88	142

See footnotes at end of table.

Table 2—Continued

Medicaid payment methods for nursing home care, by State and type of method: 1988

State	Payment method			Operating increases[1]		Allowable cost index
	Payment-limiting[1]	Prospective or retrospective[1]	Operating cost-increase[1]	Care-related (Date)	Other (Date)	
New Jersey	B-Varies with cost center	Prospective, with audit adjustment	1	5.5%-SNF 7/1/88	5.5%-SNF 7/1/88	78
New Mexico	B 110%	Prospective	2	3.30% 7/1/88	3.30% 7/1/88	124
New York	A	Prospective	Panel of independent economists	SNF-3.5% ICF-NA	SNF-3.5% ICF-NA	NA
North Carolina	C 80th	Prospective, with later adjustment	2	7.40% 10/1/88	3% 10/1/88	135
North Dakota	B 110%	Prospective	3-CPI-related for costs in North Dakota	2%-8% 10/1/88	2%-8% 10/1/88	121
Ohio	A, B, D 115%	Retrospective with ceiling	1	7.22% 7/1/88	4.60% 7/1/88	95
Oklahoma	Median	Prospective	3-Negotiated with industry	20.0%-SNF 12.0%-ICF	20.0%-SNF 12.0%-ICF	131
Oregon	C 75th	Prospective, with later adjustment	1	4.40% 7/1/88	4.40% 7/1/88	107
Pennsylvania	Higher of: B-107% or C-55th	Retrospective, with ceiling	1	4.40% 7/1/87	4.40% 7/1/87	150
Rhode Island	C-varies with cost center	Prospective	2-National nursing home input price index	10.00% 1/1/88	2.60% 11/1/88	116
South Carolina	B-mean +5%	Prospective, with later adjustment	3-Maximum factor developed by South Carolina	3.90% 7/1/88	3.90% 7/1/88	138
South Dakota	B-110% of average cost by group	Prospective	2-Market basket as applied to South Dakota's costs	4.00% 7/1/88	4.00% 7/1/88	128
Tennessee	C-Beds 50th	SNF-retrospective with ceiling; ICF-prospective	3-Provider's 3-year average, with limit	SNF-8.81% ICF-7.33%	SNF-8.81% ICF-7.33%	137
Texas	B-median +7%	Prospective	3-IPD-PCE	SNF-5.10% ICF-5.70%	SNF-3.75% ICF-3.75%	111
Utah	NA	Prospective	1	12% 7/1/89	4% 7/1/89	102
Vermont	C 90th	Prospective	3-Market basket and CPI mix	2.60% 7/1/89	NA	135
Virginia	A	Prospective, with later adjustment	2	5.32% 7/1/88	NA	NA
Washington	Lids vary with cost centers	Prospective, with later adjustment	3-Inflation increase set by legislature	3.60% 7/1/88	3.60% 7/1/88	90
West Virginia	Median + standard deviation and C-90th	Prospective	1 (semi-annual)	2.25% 10/1/88	2.25% 10/1/88	103
Wisconsin	B-varies with cost centers	Prospective	3-DRI-McGraw Hill cost component indexes	Varies by home	Varies by home	125
Wyoming	B-125% total cost 140% operation and administrative	Prospective	3-Cost report with cap of 140% of median	NA	NA	120

[1] Unless otherwise noted, the payment methods are the same for skilled nursing facilities (SNFs) and intermediate care facilities (ICFs).

NOTES: Payment-limiting legend: A—mean or median, B—percentage of mean or median, C—percentile, and D—other. Legend for operating cost-increase method: 1—CPI, 2—market basket index, 3—other. NA is not available. CPI is Consumer Price Index; GNP is gross national product; DRI is Data Resource, Inc.

SOURCE: Buchanan, R.J.: 1988 Medicaid Nursing Home Reimbursement Survey.

The objectives of these payment limits are to penalize inefficiencies by providers, to limit Medicaid expenditures, or both. The lower the percentile or the percent variation of the mean or median used to limit the Medicaid payment is, the greater is the danger that while discouraging inefficiency in the delivery of care the Medicaid program also will affect negatively the quality of care provided and the willingness of nursing homes to accept heavy-care Medicaid patients. However, the use of percentiles in Medicaid ratesetting has been associated with significantly lower Medicaid payments for nursing home care (Buchanan, 1986; Buchanan, 1987).

The Medicaid programs were asked how Medicaid payments for skilled care and intermediate care were limited in their State during 1988. The options offered on the questionnaire were mean or median, percent of the mean or median (list percent), percentile (list percentile), and other. As illustrated in Table 2, a vast majority of the States limit Medicaid payments to nursing homes using either the median (actually the 50th percentile), a percent of the median or mean, or percentiles. In addition, a number of States set separate limits for different cost centers. For example, the Kansas Medicaid program uses the 75th percentile to limit the administration cost center, the 85th percentile to limit the property cost center, the 90th percentile to limit the health care cost center, and the 90th percentile to limit the room and board cost center.

To look at this from another perspective, 90 percent of the nursing homes in Kansas would have health-care-related expenses below the Medicaid payment limit, but only 75 percent would have administrative costs below the Medicaid limit. The incentive to providers is to lower these administrative costs below the Medicaid ceiling. The higher percentile used for health-related expenses still provides cost-containment incentives but decreases the danger that the range and quality of services will be reduced to keep costs below the Medicaid ceiling.

Of course, the higher the percentile (or percent of the mean or median) is, the weaker the cost-containment incentives to providers are. That is the tradeoff Medicaid policymakers must make between strong cost-containment incentives to nursing homes and the risks of adversely affecting quality and access to care for Medicaid recipients. Establishing separate payment ceilings for different cost centers and setting a higher payment limit on care-related expenses can reduce the dangers that cost cutting will reduce the quality of care Medicaid patients receive and their access to this care.

Allowable cost index

Typically, the lower the percentile or the percent of the mean or median selected is, the more restrictive is the payment limiting method. A State using the 60th percentile would establish a more restrictive payment ceiling than a State using the 90th percentile if all other factors are the same. However, if one Medicaid program has a broader and more generous definition of allowable costs than that in another State, then the selection of a lower percentile may not result in a more restrictive payment ceiling. The Medicaid programs have considerable discretion in defining allowable costs, and the range of allowable costs differ among the States. For example, although most States do not consider bad debts a Medicaid allowable cost, some States do. In another example, some States do not consider advertising an allowable cost, but some do.

To assess the restrictiveness of each State's allowable cost base, the Medicaid programs were asked to estimate the allowability of the following 18 cost items:

- Nursing care.
- Advertising.
- Association dues.
- Food services.
- General and administrative.
- Management salaries.
- Bad debts.
- Social services.
- Legal fees.
- Employee benefits.
- Speech and physical therapy.
- Capital interest.
- Return on equity.
- Pharmacy.
- Operating interest.
- Laundry and linen.
- Housekeeping.
- Maintenance and plant operations.

A 10-point scale was given on the questionnaire for responses, with "0" equal to "Not allowed" and "10" equal to "Fully allowed." The responses from each Medicaid program for these 18 cost items were summed to calculate the Allowable Cost Index presented in Table 2. The lower the State's score on this index was, the more restrictive was the allowable cost base. The average score on the Allowable Cost Index for the 47 Medicaid programs providing data was 120.

Prospective ratesetting

Medicaid programs can set the level of payment for nursing home care in advance with a prospective payment system, or the Medicaid payment can be established after the costs of care are known using a retrospective system. Numerous studies have concluded that prospective payment is associated with lower Medicaid payments for nursing home care (Harrington and Swan, 1984; Buchanan 1983; Buchanan 1986; Swan, Harrington, and Grant, 1988; Meiners, 1982).

A pure retrospective payment system pays the nursing homes for all allowable costs for care, containing no cost-containment incentives. For this reason, retrospective payment is often limited by a payment ceiling. In States using prospective payment systems, the prospective rate may be adjusted, at the State's discretion, to reflect extraordinary costs. There are other variations of Medicaid prospective payment systems for nursing home care. For example, the prospective class methodology may set one rate for all SNFs and another for all ICFs; or the prospective payment may be set for individual nursing homes, with each rate differing among facilities, based on the historic costs of each provider inflated by an index (Swan, Harrington, and Grant, 1988). The result is that

the State Medicaid programs have adopted a variety of forms of prospective and retrospective methodologies to pay for nursing home care.

To discover whether the Medicaid programs used the prospective or retrospective payment systems to pay SNFs and ICFs during 1988, the survey questionnaire offered the following choices for selection: prospective; prospective with later adjustment; retrospective; and retrospective with ceiling. As Table 2 illustrates, the overwhelming majority of Medicaid programs used a form of prospective payment to pay for the nursing home care provided to Medicaid recipients during 1988. Only Delaware, Idaho, Massachusetts, Ohio, and Pennsylvania reported that they paid both SNFs and ICFs using the retrospective system, and all five States used ceilings on the level of payment. In addition, the Medicaid programs in Maine, New Hampshire, and Tennessee used a form of the retrospective payment system for skilled care and a form of the prospective system for intermediate care. The Maryland Medicaid program used a form of the prospective payment system for the nursing service cost center and the retrospective system with a ceiling for the other patient care, the administrative and routine, and the capital cost centers.

In efforts to contain nursing home expenditures, the trend among the Medicaid programs has been towards decreased use of the retrospective payment system. During 1975, at least 21 States used a form of retrospective payments to pay SNFs and at least 17 States used retrospective payments to pay ICFs (Buchanan, 1987). As Table 2 illustrates, the number of Medicaid programs using retrospective payment dropped sharply by 1988.

Operating cost increases

States can select from a number of methods to adjust nursing home payments to reflect increases in operating expenses. General inflation indexes can be used such as the Consumer Price Index (CPI) or the gross national product price deflator. In contrast, inflationary indexes reflecting only nursing-home-related cost increases (such as the Data Resources, Inc., SNF market basket index) can be used.

General inflation indexes contain different components, with differing weights, from the cost items associated with the delivery of nursing home care and may not reflect the inflationary trends confronting SNFs and ICFs. The use of these general inflation indexes may lead to inappropriate Medicaid payments. On one hand, if general price increases exceed the rates of increase in nursing home costs, then the Medicaid rates will increase at rates greater than necessary. On the other hand, if general price increases are below the rates of increase in nursing home costs, then the Medicaid increase will be less than necessary (Holahan, 1985). With health-related costs increasing at a more rapid rate than general prices, this latter scenario is a present danger. These lower payment increases can decrease the quality of care provided to Medicaid patients and make it more difficult to place Medicaid recipients in nursing homes, particularly those with heavy-care needs.

The States were asked in the 1988 survey how the operating cost components of the Medicaid payment were increased. The questionnaire offered the following options: CPI, market basket index, Medicare method, facility requested, and others. In addition, the States were asked to report the most recent percent change used for both care-related costs and other operating costs, as well as the effective dates of each increase.

Table 2 summarizes the responses on the method used to increase the payment of operating costs and the actual percent increase (with effective dates) for care-related and other operating costs. The States providing responses used either the increase in the CPI (14 States), a market basket index (16 States), or some other method (18 States) to increase Medicaid payments. (The Iowa Medicaid program used a market basket index to increase payments to SNFs and an Iowa-specific rate to increase payments to ICFs). The rates of increase varied from State to State. Although the effective dates for the increase and the periods covered are not identical for all States, the percent increases reported by Medicaid programs were averaged. The average increases in Medicaid payments to SNFs and ICFs for care-related expenses were 4.86 percent for States reporting these data. The average increases in Medicaid payments for other operating expenses were 4.55 percent for SNFs and 4.19 percent for ICFs for States supplying these data. (These averages excluded Massachusetts, which reported a 2-year inflation rate.)

As Table 2 illustrates, many of the States reporting the use of other methods to increase Medicaid payments for operating costs actually linked the rate of increase to price increases within their States. In addition, Missouri and Oklahoma reported that they negotiated the rate of increase, with the Oklahoma program providing detail. The rate of increase in Medicaid payments to nursing homes in Oklahoma is negotiated with the industry at open meetings, based on audited cost reports from the previous year with adjustments for new requirements mandated by law. In addition, the negotiations make adjustment for inflation, based on published indexes such as the Health Care Financing Administration's SNF market basket.

The 1988 survey revealed that a large number of State programs increase Medicaid payments for the operating costs of nursing home care using a general inflation index. Typically, health-related expenses have risen at a faster rate than overall prices. The use of a general inflation index to increase Medicaid payments to nursing homes for operating costs could result in less than adequate payment. The clear dangers of inadequate payments are decreases in the quality of care and decreased access to nursing home care for Medicaid recipients.

Payment of capital-related costs

During the survey, Medicaid programs were asked about the methodologies used to calculate payments for capital-related costs. These property-related expenses average about 13-15 percent of a nursing home's total costs (Grimaldi, 1982; Birnbaum et al., 1981b;

Spitz, 1982). As discussed earlier in the section "Medicaid payment levels," it was discovered during the survey that the 1987 Medicaid payment of capital costs averaged 10.2 percent of the Medicaid payment to SNFs and 11.9 percent of the Medicaid payment to ICFs. The purpose of capital payment is to yield a return on investment sufficient to attract investment into the production of nursing home care and to maintain an adequate supply of capital (Cohen and Holahan, 1986). The major components of property-related costs are depreciation, interest expenses, and a return on equity.

Facility valuation

To establish depreciation expenses for Medicaid payment, the value (or basis) of the nursing home must first be established. The States have developed a range of different policies to establish this value (Spitz, 1982). The historic cost, or the cost of constructing the facility, is one valuation option and establishes the least costly basis for Medicaid payment. This payment method does not recognize appreciating property values and makes nursing homes within the State less attractive investments relative to alternative projects. Another option to establish the basis of the nursing home is to value the facility at its replacement cost, which is an estimate of the costs of replacing the nursing home. With this method, according to Spitz, the level of Medicaid payment may be greater than necessary to keep the provider in operation. The replacement method is considered a costly option from the payer's perspective.

Another option for establishing the basis of the nursing home is to use the market value of the facility. A major problem with setting the basis of the facility at the market value is trafficking, or frequent sales of the nursing home, at higher prices. Trafficking establishes successively higher values of the nursing home for Medicaid payment of depreciation expenses (Baldwin and Bishop, 1984; Cohen and Holahan, 1986). Unscrupulous nursing home operators can exploit this method by continuously trading nursing homes at higher prices to establish successively higher basis values for depreciation purposes to increase Medicaid payment. To control this potential exploitation, the State can require ownership for specified lengths of time before the basis value can be increased, limit the payment of depreciation expenses, or not recognize an increase in the value of nursing homes when ownership changes.

Another survey question asked about the method used to establish the value of the nursing home and listed such options as depreciated replacement cost, market value, historic cost (date of construction), assessed value, or the use of one of these options that establishes the lowest values of the nursing home. In addition, the States were asked if the value of the nursing home could be increased for purposes of Medicaid payment when a change in ownership occurred.

As Table 3 illustrates, the majority of States responded that during 1988 the historic cost of the nursing home was used to establish the basis value for the calculation of depreciation expenses. This option is the least costly method because of the inflationary trends in real estate prices. However, this method can make investments in nursing homes less attractive than alternative investments (Spitz, 1982). In the long run, this could adversely affect the supply of nursing home beds in States using this method. The majority of States responded that during 1988 they did not recognize, for purposes of reimbursement, an increase in the value of the nursing home when a change of ownership occurred.

Capital interest expenses

Capital interest expenses are another component of property-related costs. The level of interest expenses incurred by a nursing home relates to the rate of interest charged and the size of the loan. To contain Medicaid payments for capital-related costs, a number of States are using prospective payment methodologies to pay these expenses (Kolb and Kreuzer, 1984). However, if payment of capital-interest expenses is too restrictive, new investment will be discouraged, and existing nursing homes may close (Spitz, 1982).

The 1988 survey questionnaire asked the States how they paid capital-interest expenses and provided the following options for responses:

- Actual interest expense paid.
- Prevailing market interest rates paid.
- Medicare system used.
- Actual interest expenses paid, with ceiling applied to related parties.
- Interest expenses limited by a ceiling on capital payment.

At least 27 States set a ceiling on Medicaid payment of capital costs (Table 3).

Return on equity

Another component of property-related expenses is the opportunity cost of investing the owners' capital in the nursing home. This owners' equity could be invested in alternative projects to nursing homes to produce a profit. To encourage investment in nursing homes, States can recognize a return on equity as an allowable cost and guarantee owners a profit on their investment.

Payment of a return on equity is optional, and the rate of return selected is left to the State. These decisions depend on the perceived need for Medicaid beds in each State and the potential profitability of the overall Medicaid payment system (Spitz, 1982). In fact, it can be argued that when the deductibility of depreciation and interest expenses from federally taxable income is considered, paying a return on equity at market rates overcompensates investors (Baldwin and Bishop, 1984; Cohen and Holahan, 1986). In other words, when the advantages of the Federal income tax system to cash flow are considered, the rate of return on equity allowed by the Medicaid programs can be below the market rate of return because of these subsidies from the Federal tax system.

Table 3

Medicaid payment of capital-related costs, by State and method of payment: 1988

State	Facility valuation[1]	Change of ownership value increase[1]	Capital interest expenses[1]	Return on equity[1]	Fair-rental system[1]
Alabama	1, 2, 5	Yes	E	Medicare rate	No
Alaska	3	Yes	Other	Not an allowable cost	No
Arkansas	3	Yes	E	Not an allowable cost	No
California	3	No	B	Not an allowable cost	No
Colorado	1, 4	No	E	Not an allowable cost	Yes
Connecticut	3	Sometimes in hardship situations	NA	Medicare rate	Yes
Delaware	1	No	E	Not an allowable cost	No
District of Columbia	3	No	NA	NA	NA
Florida	Fair rental value	No	E	Medicare rate	Yes
Georgia	1, 3, and Dodge Index	Yes	E	7.70 percent	No
Hawaii	3	No	E	Medicare rate	No
Idaho	3	No	E	Not an allowable cost	Yes
Illinois	3 (inflated)	No	NA	9.13 percent	Yes
Indiana	3	Yes	E	Capital return factor in per diem	No
Iowa	SNF-3 ICF-3, 4	No	SNF-C ICF-A, D, E	Not an allowable cost	No
Kansas	5	No	Property fee	Not an allowable cost	No
Kentucky	3	No	E	Not an allowable cost	No
Louisiana	3	No	E	5 percent	Yes
Maine	3	Yes, only to seller's original historic cost	E	10 percent	No
Maryland	2	No	A	8.88 percent	Yes
Massachusetts	3	No	A	10.08 percent	No
Michigan	5	Yes, with limits on the amount of increase	E	Medicare rate	Yes
Minnesota	1	No	D-also limit on overall debt	5.66 percent	Yes
Mississippi	3 as of 7/18/84	No	A-unless owner changed 7/18/84	15 percent	No
Missouri	5	No	B	12 percent	No
Montana	3	No	B	Not an allowable cost	No
Nebraska	3 owner as of 12/1/84	No	D, E	Not an allowable cost	No
Nevada	3	Yes	E	Not an allowable cost	No

See footnotes at end of table.

The States were asked if a return on equity was a payable expense during 1988; and, if so, what was the allowable rate. As Table 3 shows, 24 States did not pay a return on equity and 24 did, with many allowing the rate of return used by the Medicare program to pay SNFs. In August 1988, the Medicare program paid SNFs with a 9.125-percent rate of return. Using this Medicare rate in the calculation, the average rate of return on equity used by the Medicaid programs paying this capital-related expense was approximately 9.2 percent.

Fair-rental system

The use of a fair-rental system is an alternative to the cost-related payment of the capital expenses already discussed. A fair-rental system pays an imputed rent for the residential-related services provided by nursing homes and is intended to overcome the inflationary incentives of cost-related payment of property costs such as depreciation and interest expenses (Grimaldi and Jazwiecki, 1987). This imputed rent is calculated using an estimated current value of the capital assets used to provide care in nursing homes.

Advocates of the fair-rental system point out numerous advantages of this system, compared with cost-based payment of capital costs (Cohen and Holahan, 1986). The fair-rental system enables Medicaid programs to recognize rising property value without requiring sales, refinancing,

Table 3—Continued

Medicaid payment of capital-related costs, by State and method of payment: 1988

State	Facility valuation[1]	Change of ownership value increase[1]	Capital interest expenses[1]	Return on equity[1]	Fair-rental system[1]
New Hampshire	Historic cost date of sale	Yes	C	Not an allowable cost	No
New Jersey	1	No	Other	Other	No
New Mexico	3	Yes, with limits	D, E	Not an allowable cost	No
New York	Not applicable	No	Not applicable	Medicare rate	No
North Carolina	2, 3, 5	No	Other	Lower of Medicare rate or 11.875 percent	No
North Dakota	5	No	E	Not an allowable cost	No
Ohio	3	Yes, up to a ceiling	E	150 percent hospital bond rate up to $1 per diem	No
Oklahoma	3	No	E	Not an allowable cost	Yes
Oregon	3 during phase-in to FRV	No	NA	Not an allowable cost	Yes
Pennsylvania	3	No	E	Not an allowable cost	No
Rhode Island	3	Yes	E	NA	No
South Carolina	3	No	A, E	7.15 percent	No
South Dakota	3	No	D, E, limited by final ceiling	6.65 percent	No
Tennessee	Lower of 2, 3, or purchase	Yes, effective on sales after 7/1/88	Other	Medicare rate up to $1.50 per diem	No
Texas	3	Yes	A	Not an allowable cost	No
Utah	3	No	E	Not an allowable cost	No
Vermont	Historic cost of seller	No	C	Medicare rate	No
Virginia	3	Yes	E	Not an allowable cost	No
Washington	5	No	Financing allowance = 11 percent of net book value	Not an allowable cost	No
West Virginia	2-current reproduction cost	No	FRV system	150 percent of Medicare rate	Yes
Wisconsin	1, 3, 4	Yes	E	Not an allowable cost	No
Wyoming	2	Yes, up to ceiling	A	Not an allowable cost	No

[1] Unless otherwise noted, the capital payment mechanisms are the same for skilled nursing facilities (SNFs) and intermediate care facilities (ICFs).

NOTES: Facility valuation legend: 1—depreciated replacement cost, 2—market value, 3—historic cost (date of construction), 4—assessed value, and 5—lower of the four options. Capital interest expenses legend: A—actual interest expense reimbursed, B—prevailing market interest rates paid, C—Medicare system used, D—actual interest expenses paid with a ceiling to related parties, and E—interest expenses limited by a ceiling on capital payment. FRV is fair-rental value. NA is not available.

SOURCE: Buchanan, R.J.: 1988 Medicaid Nursing Home Reimbursement Survey.

or leases. In addition, Medicaid does not have to pay depreciation expenses for appreciating assets. Also, the fair-rental system provides incentives to nursing home owners to seek the most efficient financing of capital assets, not financing arrangements that maximize Medicaid payment. Cohen and Holahan acknowledge that fair-rental systems can be costly. However, they argue that these fair-rental costs can be controlled if States include operating profits and tax advantages in the calculation when setting target rates of return.

During the 1988 survey, States were asked if they used a fair-rental system to pay capital costs. As Table 3 documents, 12 States used this system during 1988 instead of paying nursing homes for property-related expenses with a cost-based methodology.

Incentives in nursing home payment

The Medicaid programs have the option of including a number of inventive mechanisms in their payment systems. The States can use efficiency incentives to encourage nursing homes to minimize the costs of providing care to Medicaid patients. These efficiency incentives usually involve allowing the nursing home to keep all or some of the difference between actual costs of care and a Medicaid ceiling or target rate (Holahan and Cohen, 1987; Swan et al., 1988; Buchanan and Minor, 1985).

The Medicaid programs were asked if their payment systems included efficiency incentives. In addition, they

Table 4

Medicaid incentives for nursing home care, by State 1988

State	Efficiency effectiveness[1]	Occupancy effectiveness[1]	Quality-of-care effectiveness[1]	AIDS care effectiveness[1]
Alabama	No	No	No	No
Alaska	Yes 3	No	No	No
Arkansas	No	Yes (No estimate)	No	No
California	Yes 5	No	No	No
Colorado	Yes 5	Yes 5	No	No
Connecticut	Yes 3	Yes 1	No	No
Delaware	Yes 4	Yes 4	Yes 4	No
District of Columbia	Yes 3	Yes 3	No	No
Florida	Yes 3	No	Yes 3	No
Georgia	Yes 3	No	No	Yes Not completed
Hawaii	Yes 4	No	No	No
Idaho	Yes 3	Yes 3	No	No
Illinois	Yes 4	Yes 4	Yes 4	Not in place
Indiana	Yes 3	Yes 3	Yes 3	No
Iowa	Yes 3	Yes 3	No	No
Kansas	Yes 3	Yes 5	Yes 3	Yes 3
Kentucky	Yes 5	Yes 5	No	No
Louisiana	No	No	No	Yes 3
Maine	Yes 3	Yes 5	No	No
Maryland	Yes 4	Yes 5	No	Yes 3
Massachusetts	Yes 3	Yes 4	Yes 2	Yes 3
Michigan	Yes 3	Yes 3	Yes 4	No
Minnesota	Yes 4	Yes 4	Yes 5	No, except for treatment based on activity of daily living
Mississippi	Yes 3	Yes (No estimate)	No	No
Missouri	No	No	No	No
Montana	Yes 3	No	Yes 3	No
Nebraska	Yes 3	Yes 5	No	No

See footnotes at end of table.

were provided a 1-to-5 scale to estimate the effectiveness of the incentives. A response of "1" was equal to "Ineffective," "3" was equal to "Moderately effective," and "5" was equal to "Very effective." As Table 4 illustrates, 40 States and the District of Columbia reported that they included efficiency incentives in their payment systems. The average effectiveness of these efficiency incentives was estimated at 3.27 or better than moderately effective.

In addition, Medicaid payment systems can include occupancy incentives that are also intended to increase efficiency. Studies have shown that higher occupancy rates result in lower costs, reflecting the more efficient

Table 4—Continued

Medicaid incentives for nursing home care, by State 1988

State	Efficiency effectiveness[1]	Occupancy effectiveness[1]	Quality-of-care effectiveness[1]	AIDS care effectiveness[1]
Nevada	No	No	No	No
New Hampshire	Yes 3	Yes Unknown	No	No
New Jersey	Yes 4	Yes 4	No	Yes 3
New Mexico	Yes 3	Yes 3	No	No
New York	Yes 4	Yes 5	Yes 4	Yes, under development
North Carolina	Yes 3	Yes 5	Yes 5	Yes 2
North Dakota	No	No	No	Yes, case mix as of 1/1/90
Ohio	Yes 3	Yes 2	No	No
Oklahoma	No	No	No	No
Oregon	Yes 3	No	Yes, test program in progress	No
Pennsylvania	Yes 2	No	No	No
Rhode Island	Yes 3	Yes 3	No	Unknown
South Carolina	Yes 4	No	No	No
South Dakota	No	No	No	No
Tennessee	Yes 3	Yes 3	No	No
Texas	No	No	No	No
Utah	Yes 3	Yes 3	Yes 3	Yes 3
Vermont	Yes 3	Yes 5	No	No
Virginia	Yes 4	Yes 5	No	No
Washington	Yes 3	Yes 3	Yes 3	No
West Virginia	Yes 4	Yes 4	No	No response
Wisconsin	Yes 1	Yes 2	No	Yes 2
Wyoming	Yes 1	No	Yes 1	No
Summary of responses:				
Total "No" responses	9	18	35	36
Total "Yes" responses	41	32	15	12
Average effectiveness	3.27	3.76	3.36	2.75

[1]The effectiveness scale is:

1	2	3	4	5
Ineffective		Moderately effective		Very effective

NOTE: AIDS is acquired immunodeficiency syndrome.

SOURCE: Buchanan, R.J.: 1988 Medicaid Nursing Home Reimbursement Survey.

use of fixed-cost beds and services (Ullman, 1984; Caswell and Cleverly, 1983; Meiners, 1982).

The Medicaid programs were asked if their payment systems included occupancy incentives and were provided the same 1-to-5 scale to estimate the effectiveness of these incentives. As summarized in Table 4, 31 States and the District of Columbia incorporated occupancy incentives into their payment systems, with an average effectiveness estimate of 3.76. The Medicaid programs estimated that these occupancy incentives were the most effective of the four incentive mechanisms included in the survey. Given the association between higher occupancy rates and lower nursing home costs, more States should include occupancy incentives in their payment systems.

The States also have the option of including quality-of-care incentives in their payment systems. Only 15 States included quality-of-care incentives in their payment systems and, using the 1-to-5 scale, estimated an

average effectiveness of 3.36 (Table 4). An example of quality incentives is the adjustment of payment to reflect scores on licensing and certification reviews (Swan, Harrington, and Grant, 1988).

The Medicaid programs were asked if they provide incentives to nursing homes to accept patients with acquired immunodeficiency syndrome (AIDS). Nursing homes will play an increasingly larger role in the delivery of institutional care to AIDS patients (Sussman, 1990). A nursing home may be a more appropriate provider of care than the hospital in the management of AIDS-related chronic diseases and at a much lower cost. An estimated 40 percent of all AIDS patients will eventually become dependent on the Medicaid programs to pay for their care (Buchanan, 1988). Placing Medicaid recipients with AIDS in nursing homes when institutional care is necessary will provide appropriate care and at lower costs than hospital care.

The Medicaid programs were also asked if their payment systems contained incentives to nursing homes to accept AIDS patients. Twelve States responded that AIDS incentives were either in place or in development. Using the 1-to-5 effectiveness scale, the average effectiveness response for the eight States providing estimates was 2.75. Although the Minnesota Medicaid program responded that there were no specific AIDS-related incentives in its nursing home payment system, payment to nursing homes in Minnesota are case-mix related or based on the care needs of patients. Also, the Florida Medicaid program reported that although it did not have AIDS-care incentives, it did make additional payments to nursing homes for the care of AIDS patients. As the Medicaid programs become increasingly important payers of
AIDS-related care, the States should develop effective incentives for nursing homes to accept AIDS patients not only to contain program expenditures but to assure Medicaid recipients with AIDS that they will have access to appropriate, cost-effective care.

Summary and conclusions

Medicaid policymakers often must choose between conflicting objectives in the design and implementation of payment systems for nursing home care. One set of objectives involves developing payment mechanisms that establish payment rates at levels sufficient to promote the delivery of good quality nursing home care and to assure Medicaid recipients that they will have access to that care. A potentially conflicting set of objectives is the need to contain payments to nursing homes because of budget constraints. Medicaid policymakers must often tradeoff between assurances of quality and access on one hand and program expenditure control on the other.

Because institutional long-term care is the largest expenditure category in State Medicaid budgets, nursing home payments offer a primary target for Medicaid cost-containment efforts. Payments to SNFs, ICFs, and ICFs for the mentally retarded approached 42 percent of total spending by all Medicaid programs during 1988 (Health Care Financing Administration, 1989). In individual States, these percents can be much higher. For example, in Minnesota and North Dakota, payments to long-term care facilities equaled 61 percent and 56 percent of total Medicaid spending, respectively, during 1988.

Efforts to control these large Medicaid expenditures for nursing home care can be seen in the payment systems developed by the States that are presented in this article. Using the payment data collected from the States, the average Medicaid payment for skilled care of $60.65 during 1988 increased only 4.14 percent from the average payment of $58.24 in 1987; the average Medicaid payment for intermediate care in 1988 increased only 3.11 percent from the 1987 level. These average rates of increase were less than both the general rate of inflation and the rate of increase in the costs of providing health services. With the exception of Minnesota where the payment charged to private patients in nursing homes cannot exceed the Medicaid level, Medicaid payments for skilled care and intermediate care are substantially less than the payments from private patients. Averaging the estimates of these differentials from the States providing data during the 1988 survey indicates that Medicaid payment levels were $11.98 per day less than private payments for skilled care and $10.19 per day less for intermediate care. These relatively low Medicaid payment levels for nursing home care, combined with low rates of increase, raise questions about the adequacy of the level of services Medicaid recipients receive in nursing homes. In addition, with large differentials between Medicaid and private payments for this care, it becomes obvious why the placement of Medicaid recipients in SNFs and ICFs is often difficult, especially those patients with heavy-care needs.

The results of the 1988 survey of Medicaid programs illustrate the payment mechanisms adopted by the States to contain payments. In contrast to the 1970s, few Medicaid programs used retrospective payment systems to pay for nursing home care during 1988. Review of the literature reveals that prospective ratesetting has been consistently associated with lower Medicaid costs. In addition, many States use relatively low percentiles or percent variations around a group mean to set limits or ceilings on Medicaid payments. The lower the percentile or percent selected to establish these payment ceilings is, the greater is the number of nursing homes with costs above the limits. Although restrictive payment limits may encourage providers to reduce costs, these ceilings also can decrease the level of services provided to Medicaid patients and reduce their access to care. One approach to offset these quality-related dangers is to limit Medicaid payments for care-related cost centers separately from other nursing home cost centers, with higher percentiles or percents used to set ceilings on payments for care-related services.

The 1988 survey attempted to measure the restrictiveness of the cost base allowed by each Medicaid program. The allowable cost index that was developed for this study illustrates the relative restrictiveness of each State's allowable cost base. Data were also collected on the mechanisms the Medicaid programs used to increase the payment levels for operating expenses. Many States used general inflation indexes, such as the CPI or the gross national product price deflator. With health-related costs increasing more rapidly than general prices, the use of these general inflation indexes to increase Medicaid payments results in less than needed payment. Again, inadequate increases in Medicaid payments can lead to decreases in the quality of care and decreased access to care for Medicaid patients.

Historically, the payment of capital-related expenses often involved provider manipulation and abuse of the Medicaid systems. Trafficking in nursing homes results in greater Medicaid payments for capital-related expenses. Federal and State Medicaid policies have been designed to limit these increased costs resulting from trafficking. Responses to the 1988 survey indicate that most Medicaid programs use the least costly methods to calculate depreciation expenses, which are a major component of capital costs. A majority of Medicaid programs also reported they set a ceiling on payments for capital-related expenses. In addition, 24 Medicaid programs did not pay a return on equity during 1988. Although restrictive payment policies may limit Medicaid expenditures for property-related costs, they can also make investments in nursing homes unattractive. The purpose of capital payment is to provide a sufficient return on investment to attract capital into the production of nursing home care. Containment of capital payment by the Medicaid programs could retard the development of new nursing home beds needed by an increasingly older American population.

Restrictive Medicaid payment systems may limit payment increases to nursing homes and restrain Medicaid spending sufficiently to muddle through current fiscal problems. However, in the short run, the quality and range of services provided to Medicaid recipients in nursing homes may decline. In addition, it will become more difficult to place Medicaid recipients in nursing homes, particularly patients with heavy-care needs. In the long run, restrictive Medicaid payment policies will limit the supply of beds below needed levels. Without adequate Medicaid payment levels, the supply of nursing home beds will grow sufficiently to meet only the demand from private patients. Because the Medicaid programs currently are the only major third-party payers of nursing home care, and unless new financing options are created, the long-term care services available to many elderly Americans will be severely restricted in the future.

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