

THE GROWTH OF MEDICAL GROUPS PAID THROUGH CAPITATION IN CALIFORNIA

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Abstract *Background.* In California, it is common for health maintenance organizations (HMOs) to contract with large medical groups that are paid through capitation and are responsible for managing a full spectrum of medical services.

Methods. We studied six large medical groups in California — Bristol Park Medical, Friendly Hills HealthCare Network, HealthCare Partners Medical Group, Mullikin Medical Centers, Palo Alto Medical Foundation, and San Jose Medical Group — that are paid through capitation and that are growing as a result of contracts with managed-care organizations. We conducted interviews and obtained data on factors such as patient enrollment, capitation and other revenue, numbers of days spent by enrollees in the hospital, and numbers of visits to physicians per enrollee.

Results. Between 1990 and 1994, the number of HMO enrollees whose care was paid for through capitation in the six medical groups increased by 91 percent, from 398,359 to 759,474. In 1994, the mean number of hospital days per 1000 HMO enrollees ranged from 120 to 149 for non-Medicare patients and from 643 to 936 days for Medicare patients. By comparison, in 1993 the

mean numbers of hospital days per 1000 HMO enrollees not covered by Medicare were 232 for California and 297 for the United States; for HMO enrollees covered by Medicare, the numbers were 1337 for California and 1698 for the United States. In 1994, the average annual number of visits to physicians for HMO patients in the six groups not covered by Medicare ranged from 3.1 to 3.9; for Medicare patients, it ranged from 6.8 to 9.3; these rates were slightly lower than statewide and national rates. Four of the groups have sold their assets (such as facilities, supplies, equipment, and patients' charts) to outside investors; the physicians remain employed by physician-owned professional corporations.

Conclusions. Medical groups paid through capitation offer a model for the status of physicians in managed-care systems that differs from the employee status offered by staff-model HMOs and the subcontractor status offered by HMOs that negotiate directly with individual physicians. Despite their growth, such medical groups in California face substantial challenges, such as obtaining the financial assets necessary to sustain rapid growth. (N Engl J Med 1995;333:1684-7.)

IN managed-care systems, health care organizations bear the financial risk of operating within a predetermined budget and are responsible for coordinating a full spectrum of clinical services.^{1,2} In many regions of the United States, health maintenance organizations (HMOs) have assumed these roles, employing or contracting with physicians while maintaining budgetary authority and providing managerial expertise.³ Physicians have also organized medical groups that are paid on a capitated basis and are responsible for managing the use of services, costs, and quality.⁴

Medical groups paid through capitation have grown markedly in California, a state where nearly 50 percent of people with commercial health insurance and 30 percent of Medicare beneficiaries are enrolled in HMOs.⁵ Integrated medical groups are paid on a capitated, per-member-per-month basis for professional services and, increasingly, for hospital, home health, and pharmacy services. These groups manage the full spectrum of care, including the services provided by their own physicians and those provided by outside physicians, hospitals, and ancillary organizations. They are increasingly accountable for providing data on patients' satisfaction, the use of preventive services, and other measures of performance. We prepared case studies of six large medical groups in California that are paid through capitation and are actively seeking to grow through increased numbers of contracts with managed-care organizations.

METHODS

The six medical groups were chosen to reflect the existing diversity among medical groups paid through capitation with respect to geographic location, primary care and specialty mix, relationship with

hospitals, and ownership structure. They were selected after initial visits to 19 integrated medical groups in California. The six groups obtain the majority of their patients through HMO contracts and receive most of their revenue through capitated payments. The groups do not pay their member physicians through capitation. Instead, they pay a salary plus an annual bonus based on the physician's productivity, patients' satisfaction, and profitability of the group. The groups differ considerably in the extent to which they rely on outside contracting rather than internal referrals for specialty services, but all contract with nonmember physicians for some services. Although three of the groups own local community hospitals, all six contract with multiple independent hospitals to obtain geographic coverage and tertiary care services. Four of the groups have sold their assets to outside investors, including two that had previously sold minority interests. The assets sold include the groups' facilities, supplies and equipment, and patients' charts. Individual clinicians have remained employees of physician-owned professional corporations that contract with the investing organizations to provide medical care.

Bristol Park Medical is a primary care group with 61 physicians serving 94,000 HMO patients at 10 sites in coastal Orange County, a suburban area south of Los Angeles. It owns 50 percent of a local community hospital and is owned by its member physicians. The Friendly Hills HealthCare Network is a multispecialty medical group with 147 physicians and 100,000 HMO patients at 15 sites in northern Orange County. It owns its own hospital. In 1994, the medical group and hospital were sold by the member physicians to Caremark, a for-profit diversified health care and physician-practice-management company. HealthCare Partners Medical Group is a primary care-based multispecialty medical group with 335 physicians serving 200,000 HMO patients at 28 sites throughout Los Angeles. It is owned by its member physicians. Mullikin Medical Centers is a primary care-based multispecialty group with 485 physicians and 249,000 HMO patients at several dozen sites in Los Angeles, Orange County, and the San Francisco area. It owns a hospital in southern California and has merged with several medical groups in the Pacific Northwest. In 1993, Mullikin sold a minority share to the Daughters of Charity, a national nonprofit hospital system. In 1995, Medpartners, a for-profit physician-practice-management company based in Birmingham, Alabama, acquired the tangible assets of Mullikin. The Palo Alto Medical Foundation is a multispecialty medical group with 162 physicians and 57,000 HMO patients at three sites near Palo Alto, south of San Francisco. In 1992 it was purchased by Sutter Health, a nonprofit hospital system. The San Jose Medical Group is a primary care-based multispecialty group with 103 physicians caring for 59,000 HMO patients at nine sites in the San Jose area. Until recently, it was owned by its physicians, with the exception of a minority share

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Supported by an Investigator Award in Health Policy Research from the Robert Wood Johnson Foundation.

owned by Alexian Brothers, a nonprofit hospital system. In the fall of 1995, the physicians sold the group's assets to UniHealth America, a nonprofit health care system based in Los Angeles.

We interviewed clinical and administrative leaders in each group, such as the chief executive officer, the medical director, the chief operating officer, the chief financial officer, and the director of contracting. We interviewed other physician and nonphysician staff members with responsibilities for hospital-utilization management, management of specialty referrals, skilled nursing facilities, home health care, and case management for chronically ill patients. Key people were interviewed more than once. The interviews were supplemented by reviews of trade publications and by interviews with leaders in other medical groups, hospital systems, HMOs, business purchasing alliances, professional associations, and state regulatory agencies.

Data on enrollment, revenues, HMO contracts, visits to physicians, and hospital services were obtained through the Unified Medical Group Association, a professional association representing 87 medical groups serving 2.8 million HMO patients in California and 1.4 million in other states. This association obtains financial and utilization data from its members and is responsible for ensuring the consistency and quality of the data, although the data themselves are not audited. Additional data and documents were obtained directly from each group. Some of the data we report were derived from the administrative records of the medical groups, which are used for internal accounting purposes and for reporting to HMOs and purchasers.

RESULTS

Patient Enrollment and Capitation Payment

The growth of the six medical groups from 1990 to 1994 is shown in Table 1. A severe economic recession in California has resulted in a considerable loss of jobs and health insurance. Nonetheless, these groups increased their numbers of HMO enrollees paid for through capitation by 91 percent, from 398,359 to 759,474. Growth was particularly dramatic for the HealthCare Partners and San Jose medical groups, which doubled their enrollment, and for Mullikin Medical Centers, which almost tripled its enrollment. Growth was achieved both by adding new physicians and patients and by merging with other medical groups. The figures in Table 1 understate the overall scale of these organizations, since they exclude enrollment in independent practice associations owned or managed by the integrated groups.

The financial base of the six groups comes largely from capitation payments for professional services. The HealthCare Partners Medical Group, for example, earned \$206.3 million in 1994, of which \$158.5 million (77 percent) was from capitation, \$31.5 million (15 percent) from risk pools for the cost of hospital services, \$6.0 million (3 percent) from HMO revenues not based on capitation, and \$8.2 million (4 percent) from fee-for-service patients. Bristol Park Medical, Friendly Hills HealthCare Network, and Mullikin Medical Centers own their own community hospitals and therefore, under California law, can receive capitation payments from HMOs for hospital services as well as for professional services. These payments cover not only services provided in

the hospitals these groups own but also services provided in other hospitals with which they contract. The three groups that do not own their own hospitals gain analogous revenues by negotiating with HMOs for the greater part (as much as 99 percent) of savings from hospital risk pools.

The six groups vary considerably in the extent to which they provide or subcontract for specialty services. Although the primary care-based Bristol Park Medical and the multispecialty Friendly Hills HealthCare Network had similar patient enrollments in 1994, Bristol Park had 61 physicians and provided 57 percent of the professional services required by patients, whereas Friendly Hills had 147 physicians and provided 92 percent of the necessary professional services. Both groups receive capitation payments for the full range of primary, specialty, and hospital care. Of the six groups, the Palo Alto Medical Foundation is the only one that received the majority of its revenue for professional services from sources other than capitation payments.

Although these six groups contract with several HMOs each, a large percentage of their HMO patients come from a small number of large plans. In 1994, each group received 55 percent or more of its HMO patients not covered by Medicare from three contracts. Five of the groups received a lower percentage of their patients from their top three non-Medicare contracts in 1994 than in 1990, as they sought new contracts to expand their patient bases. The San Jose Medical Group and the Palo Alto Medical Foundation each had an exclusive contract with an HMO in 1990 but shifted to non-exclusive contracts to allow more rapid growth and to reduce their dependency on a single contract.

Utilization Management

In 1994, hospital utilization by HMO patients not covered by Medicare ranged from 120 to 149 days per

Table 1. Selected Characteristics of Six Medical Groups in California.

CHARACTERISTIC	BRISTOL PARK MEDICAL	FRIENDLY HILLS HEALTHCARE NETWORK	HEALTHCARE PARTNERS MEDICAL GROUP	MULLIKIN MEDICAL CENTERS	PALO ALTO MEDICAL FOUNDATION	SAN JOSE MEDICAL GROUP
No. of HMO enrollees						
1990	72,912	90,048	90,618	88,539	31,112	25,130
1994	94,304	100,051	200,415	249,085	57,095	58,524
Professional-services capitation revenue (thousands of \$)						
1990	27,235	54,741	65,596	41,935	16,778	12,010
1994	49,077	75,470	158,452	154,088	39,263	37,420
Other revenue (thousands of \$)						
1990	10,713	22,479	21,720	18,518	50,707	14,990
1994	18,153	31,465	47,354	102,731	50,737	21,380
No. of member physicians						
1990	37	113	150	79	146	49
1994	61	147	335	485	162	103
% of professional services delivered by member physicians						
1990	44	86	79	89	94	79
1994	57	92	57	86	89	72
% of patients in top three commercial HMO contracts						
1990	83	74	53	79	100	100
1994	71	55	65	68	69	72

1000 enrollees, with an average (weighted to account for the enrollment in each group) of 139 (Table 2). Hospital utilization by Medicare beneficiaries ranged from 643 to 936 days per 1000 enrollees, with an average of 893 (Table 3). These utilization rates are 40 percent below the California average for enrollees in commercial HMOs (232 days) and 33 percent below the California average for HMO enrollees covered by Medicare (1337 days). The number of hospital days per 1000 enrollees is even higher for HMOs in other states. The inpatient utilization rate for all HMOs in the United States was 297 days per 1000 patients covered by commercial insurance and 1698 days per 1000 Medicare patients in 1993.⁵ These rates exceed the enrollment-weighted average rates for these six groups by 114 and 90 percent, respectively.

The groups had rates of physician visits per enrollee in 1994 that were slightly lower than those for all California HMOs and for HMOs in other states. The average annual number of visits to physicians for non-Medicare patients ranged from 3.1 to 3.9, with an enrollment-weighted average of 3.4 (Table 2). In 1993, the comparable rate for all California HMOs was 3.8 visits per enrollee, and the national HMO rate was 3.6 visits. For Medicare patients, the annual number of physician visits ranged from 6.8 to 9.3, with an enrollment-weighted average of 7.4, as compared with an average of 9.1 visits

for California HMOs and 7.9 visits for all U.S. HMOs (Table 3).

Between 1990 and 1994, the number of hospital days per 1000 HMO enrollees not covered by Medicare declined by 16 percent at Bristol Park, 37 percent at Friendly Hills, 32 percent at HealthCare Partners, 16 percent at Mullikin, and 40 percent at San Jose (Table 2). The number of hospital days per 1000 enrollees covered by Medicare declined by 6 percent at Friendly Hills and by 13 percent at Mullikin (Table 3). It increased at HealthCare Partners because of a merger with a group that had higher utilization rates. For most plans, the number of physician visits per enrollee declined between 1990 and 1994.

DISCUSSION

Between 1990 and 1994, the six medical groups we studied grew rapidly. HMOs in California have come to rely on such independent physician organizations to manage the delivery of care. These groups are financially at risk for the costs of care because they are paid through capitation.⁶

Many physicians who are not employed by group- or staff-model HMOs or who do not practice in large groups view managed-care organizations in terms of the intervention of a third party in clinical decision making. Such physicians may be affiliated with several HMOs, each of which has its own network

Table 3. Use of Medical Services by HMO Patients Covered by Medicare.

MEDICAL GROUP	NO. OF ENROLLEES	TOTAL PHYSICIAN VISITS	PHYSICIAN VISITS PER ENROLLEE	NO. OF HOSPITAL DISCHARGES	AVERAGE LENGTH OF HOSPITAL STAY	HOSPITAL DAYS PER 1000 ENROLLEES
Bristol Park Medical						
1990	0	0	—	0	—	—
1994	2,427	22,669	9.3	526	4.2	905
Friendly Hills HealthCare Network						
1990	11,428	86,911	7.6	2751	4.0	975
1994	15,401	117,697	7.6	2626	5.4	914
HealthCare Partners						
1990	20,292	152,044	7.5	5485	3.2	850
1994	28,717	195,848	6.8	6837	3.9	936
Mullikin Medical Centers						
1990	3,048	26,437	8.7	1284	4.3	1027
1994	19,294	142,525	7.4	4662	3.7	894
Palo Alto Medical Foundation						
1990	0	0	—	0	—	—
1994	3,155	—	—	443	4.6	643
San Jose Medical Group						
1990	0	0	—	0	—	—
1994	7,168	64,024	8.9	1428	3.9	774
All HMO patients covered by Medicare (1993)						
California	—	—	9.1	—	—	1337
Massachusetts	—	—	7.4	—	—	2137
Minnesota	—	—	7.6	—	—	1940
New York	—	—	7.5	—	—	2133
United States	—	—	7.9	—	—	1698

Table 2. Use of Medical Services by HMO Patients Not Covered by Medicare.

MEDICAL GROUP	NO. OF ENROLLEES	TOTAL PHYSICIAN VISITS	PHYSICIAN VISITS PER ENROLLEE	NO. OF HOSPITAL DISCHARGES	AVERAGE LENGTH OF HOSPITAL STAY	HOSPITAL DAYS PER 1000 ENROLLEES
Bristol Park Medical						
1990	72,912	351,737	4.8	3,820	3.1	162
1994	91,877	361,266	3.9	4,445	2.8	136
Friendly Hills HealthCare Network						
1990	78,620	334,844	4.3	4,246	3.5	191
1994	84,650	284,619	3.4	4,685	2.2	120
HealthCare Partners						
1990	70,326	294,260	4.2	5,691	2.7	218
1994	171,698	530,045	3.1	8,269	3.1	149
Mullikin Medical Centers						
1990	85,491	289,766	3.4	5,457	2.6	166
1994	229,791	801,219	3.5	10,003	3.2	139
Palo Alto Medical Foundation						
1990	31,112	—	—	—	—	—
1994	53,940	—	—	2,318	3.3	140
San Jose Medical Group						
1990	25,130	99,366	4.0	1,597	3.7	235
1994	51,356	173,448	3.4	2,360	3.0	140
All HMO patients not covered by Medicare (1993)						
California	—	—	3.8	—	—	232
Massachusetts	—	—	4.2	—	—	343
Minnesota	—	—	3.1	—	—	321
New York	—	—	3.7	—	—	356
United States	—	—	3.6	—	—	297

of specialists and hospitals and its own methods of managing utilization. In contrast, the six medical groups we studied manage utilization through their own medical directors and physician committees. It is our impression that this method of management allows decisions to be based on more detailed clinical information than is available to outside reviewers and facilitates a cooperative rather than an adversarial approach to utilization management. These groups offer a model for the status of physicians in managed-care systems that differs from the employee status offered by staff-model HMOs and the subcontractor status offered by HMOs that negotiate directly with individual physicians.

For all the medical groups, the number of hospital days per 1000 enrollees each year was substantially lower than California or national averages. The utilization rates for physicians' and hospitals' services that were reported by these groups, however, were not adjusted for case mix. Thus, they could not be compared directly with adjusted rates for other groups of patients. We cannot exclude the possibility that the lower rates of hospital utilization and visits to physicians reflect the provision of services to relatively healthy groups of patients. Nevertheless, if extrapolated to the state and national level, these low rates of hospital utilization would result in an excess hospital capacity substantially higher than that estimated on the basis of utilization rates in staff-model HMOs.⁷

It is noteworthy that the six groups had rates of visits to physicians per enrollee in 1994 that were slightly lower than those for all California HMOs and for HMOs nationally. Given efforts to substitute outpatient for inpatient care, higher numbers of visits to physicians per year might have been expected. A possible explanation may be the substitution of visits to nurse practitioners and physician's assistants for visits to physicians. In 1994, for example, Bristol Park Medical had 16 such practitioners supporting its 61 primary care physicians. We did not collect overall data on visits to nurse practitioners and physician's assistants, however, and comparative state and national data were not available.

It is important to emphasize that a considerable por-

tion of the data made available to us was derived from the internal records of the medical groups. Although the consistency and quality of the data were improved by the Unified Medical Group Association, the accuracy of the data could not be independently verified.

Despite their growth, independent medical groups in California face substantial challenges. Success in managed care requires continued rapid growth, which in turn requires substantial investment in new facilities, management-information systems, and the acquisition of additional member physicians and medical groups. Unlike HMOs in some states, those in California, with the exception of Kaiser Permanente, generally do not seek to employ physicians directly. Their primary emphasis has been on acquiring purchaser contracts and making use of their actuarial experience and marketing expertise. Independent medical groups have sold — or considered selling — all or part of their assets to nonphysician organizations with substantial financial assets. The principal options for selling their assets include selling to hospital systems and physician-practice-management companies, and making direct equity offerings to the public.

We are indebted to Andrew Adams, M.D., Albert Barnett, M.D., Victor Corsiglia, M.D., David Druker, M.D., Richard Ferreira, M.D., James Hillman, Robert Jamplis, M.D., Patrick Kapsner, Robert Margolis, M.D., Gloria Mayer, Ed.D., Mark Moser, Barbara Shaw, Elliot Sternberg, M.D., Dirk Thornley, Mark Wagar, and many others who contributed their time and insights to this research project.

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