UC Berkeley

UC Berkeley Previously Published Works

Title

Health care purchasing and market changes in California

Permalink

https://escholarship.org/uc/item/97k9g3hv

Journal

Health Affairs, 14(4)

ISSN

0278-2715 1544-5208

Author

Robinson, James C

Publication Date

1995-11-01

DOI

10.1377/hlthaff.14.4.117

Peer reviewed

Downloaded from http://content.healthaffairs.org/ by Health Affairs on May 26, 2016 by HW Team

Health Affairs

At the Intersection of Health, Health Care and Policy

Cite this article as:
J C Robinson

Health care purchasing and market changes in
California

Health Affairs 14, no.4 (1995):117-130
doi: 10.1377/hlthaff.14.4.117

The online version of this article, along with updated information and services, is available at:

http://content.healthaffairs.org/content/14/4/11

For Reprints, Links &

Permissions: http://content.healthaff

airs.org/1340_reprints

.php

Email Alertings:

http://content.healthaffairs.or g/subscriptions/etoc.dtl

Not for commercial use or unauthorized distribution

To Subscribe:

https://fulfillment.healthaffair s.org

Health Affairs is published monthly by Project HOPE at 7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814-6133. Copyright © by Project HOPE - The People-to-People Health Foundation. As provided by United States copyright law (Title 17, U.S. Code), no part of may be reproduced, displayed, or transmitted in any form or by any means, electronic or mechanical, including photocopying or by information storage or retrieval systems, without prior written permission from the Publisher. All rights reserved.

HEALTH CARE PURCHASING AND MARKET CHANGES IN CALIFORNIA

by James C. Robinson

Prologue: The relationships between purchasers of medical care and its providers are evolving in California more rapidly perhaps than in any other state as managed competition takes hold in the marketplace. The Clinton administration's failed effort to enact comprehensive reform included a regulatory prescription that configured managed competition around publicly sponsored purchasing cooperatives. The California model is decidedly more private, featuring efforts by large employers to negotiate lower costs and better-quality care for their substantial investment in keeping their employees healthy. In this paper Jamie Robinson discusses the impact of these negotiations on the cost of care and on how large purchasers are influencing the configuration of the delivery system. In short, Robinson concludes that purchasers and providers are moving from arm'slength contractual relationships to longer-term organizational ties, similar to bonds that are prevalent in Japan. Robinson, cm associate professor of economics at the University of California, Berkeley, obtained his doctorate from the same institution. He has devoted his analytic and research skills to applying the princibles of institutional economic theory to a study of health care organizations, a process he describes as "shoeleather social science-collecting facts and analyzing them at the same time." Robinson's multiyear effort is supported by an Investigator Award in Health Policy Research from The Robert Wood Johnson Foundation. His research has already resulted in two other recent publications. One, entitled "The Changing Boundaries of the American Hospital," was published in The Milbank Quarterly (72, no. 2, 1994). A second paper, "The Growth of Medical Groups Paid through Capitation in California," was published in The New England Journal of Medicine (21 December 1995).

Abstract: This paper analyzes the process and outcomes of collective negotiations among large private employers and health maintenance organizations (HMOs) in California. In 1994, prior to collective negotiations, differences in benefit packages, risk mix, and volume of purchasing accounted for only one-third of the variance in premiums among firms and HMOs. The 1995 collective negotiations reduced the variance by 22 percent and the enrollment-weighted mean premium by approximately 9 percent, while enriching the standard benefit package. Savings for the eleven participating firms totaled \$36.5 million. Large purchasers are reducing the number of health plans offered to their employees, standardizing the benefit package, using collective negotiations to contain costs, and shifting from vendor to partner relations with HMOs.

To California, where large employers and health plans have vigorously developed a market for managed care, new rules are emerging. Employers originally offered large numbers of health maintenance organizations (HMOs) and delegated to their employees the responsibility for informed and cost-conscious choice, but discovered that this reduced them to being price takers in a market driven by adverse selection. To gain the benefits of competition, employers found that they do not need to offer large numbers of plan choices (competition in the market). Rather, employers can force health plans to compete on the basis of price for the right to be one of the small set of plans that gain contracts and then are made available to employees (competition for the market). Health plans negotiate premiums bilaterally in hopes of being awarded a franchise by the employer, rather than establishing premiums unilaterally in hopes of attracting the large employers and thereby gaining market share.

The Pacific Business Group on Health (PBGH), an alliance of twentyseven large firms with 2.5 million employees and dependents and \$3 billion in annual health expenditures, is spearheading the transformation of managed care on the West Coast. In this paper I describe the evolution of large employers' strategies for managing health care competition, including standardization of the benefit package across firms and health plans, analyze sis of enrollee risk selection across firms and health plans, requirements for data disclosure, mandates for measurable improvements in quality, and collective negotiation of premiums. I then analyze the distribution of HMO premiums faced by PBGH member companies in 1994, prior to the collective negotiation process. This is followed by an examination of the results of the group negotiating process, including the percentage price reductions from the health plans and the savings achieved for the purchasers. Finally, I offer an interpretation of the evolution of group purchasing and managed competition in terms of the larger transition of the U.S. economy toward relational contracting and network forms of organization.

The Changing Roles Of The Health Care Sponsor

Attracted by the low premiums and comprehensive benefits offered by Kaiser Permanente and other HMOs, large firms headquartered in the San Francisco area were early and enthusiastic advocates of managed care. As more and more HMOs entered the market in the 1980s, many firms expanded the options offered to their employees to obtain the best price and quality of service. Some believed that offering large numbers of options would create price competition among HMOs, in turn stimulating medical groups and hospitals to reduce costs, increase quality, and focus on consumer satisfaction. Others offered large numbers of HMOs as an inducement for employees to switch to managed care. By the end of the decade, however, disenchantment had set in. HMO premiums were lower than those available from fee-for-service insurers but were increasing at the same rate, raising suspicions of shadow pricing. HMOs competed for enrollees along nonprice dimensions, principally through lower consumer cost sharing than fee-for-service plans required, rather than by lower prices to employers. Employers became concerned that their self-insured fee-forservice plans were being left with high-risk patients while HMOs attracted younger, healthier, and more mobile enrollees.

These problems could not be solved by increases in coinsurance and deductibles the standard employer cost containment strategy of the time-since the HMOs had no deductibles and only small copayments at the time of service. Employers believed that managed care and other network-based providers could achieve dramatic efficiency gains over conventional insurance, but only if the sponsors took a more active role. The first step was to drop indemnity and service benefit insurance altogether. The fee-for-service option in each company was transformed first into a self-insured managed indemnity plan (indemnity with utilization review but without a provider network), then to a preferred provider organization (PPO) (network-based with utilization review but without primary care referral required for specialty care), and then to a point-of-service plan (network-based with utilization review and required primary care referral). For many firms the goal has been full transition to HMOs. On average, two-thirds of all PBGH member company employees are enrolled in HMOs, with a range of 50 to 97 percent per company.

While maintaining a strong preference for managed care, individual firms began to move away from the level-playing-field, consumer-choice model of managed competition by restricting the number of HMOs offered to their employees. Firms that had offered six or more options in California reduced their options to two or three group- or network-model HMOs. The intent was to have more enrollees in fewer plans and thereby improve

employers' bargaining leverage and ability to extract lower premiums. It also increased employers' ability to evaluate risk selection among plans, reduce administrative costs, and ensure access and quality of services. For example, Pacific Telesis reduced its employee options from twelve HMOs to three, Union Bank dropped from six to three, and Chevron dropped from ten to two (each firm also maintains one self-insured PPO or point-of-service plan). These reductions increased the economic importance of the purchaser to its health plans and, more importantly, opened the possibility of developing a stable relationship that permitted mutual gains.

At the same time that they were substituting a partner model for the vendor model of HMO relations, individual firms began to cooperate with other large purchasers through the PBGH, known at the time as the Bay Area Business Group on Health. The PBGH initially focused on improving data disclosure from HMOs, conducting employee satisfaction surveys, and promoting coverage of preventive services. Collective action on these issues was crucial because individual purchasers lacked the leverage to obtain consistent and comparable data on enrollee outcomes, satisfaction, and use of preventive services from the HMOs. The intent was not to obtain volume discounts, in the sense of forcing the health plans to reduce premiums for one set of buyers and raise them for others, but rather to lay the foundation for joint efforts to lower administrative costs, resolve questions of adverse selection, reduce excess capacity and duplication in provider networks, and otherwise reduce the costs of the health care system as a whole.

Since 1989 the PBGH has conducted annual surveys of employees and dependents regarding their satisfaction with their health plan, their physician and medical group, and their hospital care. In recent years these surveys have been expanded to include use of preventive services and self-assessed health status. Consumer satisfaction, use of preventive services, and (change 'in) self-assessed health status are interpreted by the PBGH as valid, albeit incomplete, measures of HMO performance. The PBGH also has developed methods for gauging the quality of services in California, using studies of process and risk-adjusted outcomes for selected clinical areas, such as cesarean section, organ transplantation, and perinatal mortality. Member companies recently established a \$1.5 million fund to support the development and diffusion of new tools for measuring clinical quality and consumer satisfaction under managed care.

The PBGH member companies faced two major problems in comparing the value of competing HMOs: differences in benefit packages and in enrollee risk mix. Every firm and HMO had somewhat different benefit offerings, which confounded comparisons of price, confused consumers, frustrated physicians, and added to administrative costs. The California Public Employees Retirement System (CalPERS), the purchasing alliance for public employers, had developed a standard benefit package, which it mandated for all contracting HMOs. The PBGH adopted this standard package with carve-out options for mental health and variable copayment levels. The firms are working to standardize the much more heterogeneous benefit packages in their self-insured point-of-service plans.

The PBGH is collaborating with university and HMO researchers to develop and implement measures of enrollee risk selection among competing health plans using four sets of data: demographic risk weights (age, sex, and family size), personnel files (salary, job title, and other personnel factors in addition to demographic weights), self-assessed health status derived from employee surveys (combined with demographic weights), and claims data on high-cost, nondiscretionary procedures. To date the firms have decided not to risk-adjust payments. They are continuing to refine the methods for measuring risk, however, on the assumption that risk differences will eventually drive price differences. The more serious immediate concern is to develop comparable risk selection measures for their point-of-service plans, which may experience the more extreme forms of favorable and adverse risk selection.

In 1993-1994 the PBGH moved toward collective negotiations with HMOs in California. Since participation in the PBGH was voluntary, considerable autonomy would continue to rest with individual firms. First, participation in the group negotiations was voluntary; some PBGH member firms declined to participate because of union contracts or other reasons. For example, multiyear union contracts in the utility industry often specify particular benefits that are inconsistent with the standard PBGH package. Public employers, such as the University of California and the CalPERS employers, preferred to conduct their own negotiations with HMOs. (CalPERS is a group purchaser in its own right as well as being a member of the PBGH.) Second, individual PBGH firms could choose which HMOs to offer. While the alliance would negotiate premiums with all HMOs that wished to participate, no firm would be obligated to offer any particular HMO to its employees. Initially, most firms intended to continue offering only the small number of health plans with which they already had contracts. Some were interested in switching HMOs or further reducing the number of offerings, and others were interested in phasing out their pointof-service offerings altogether, perhaps through offering new HMO options.

All HMOs in California were invited to submit premium bids under a clearly defined format. Initial bids would not be accepted by the firms and then simply offered to their employees, as in the level-playing-field model. Rather, PBGH negotiators would bargain down on particular HMOs after seeing the other bids but without disclosing any bids to competing HMOs.

Also, each HMO had to bargain a single premium for the entire PBGH risk pool without knowing which firms would subsequently decide to contract with which HMOs. To avoid "cherry picking" of low-risk firms, health plans were prohibited from offering a price to any individual PBGH firm that was lower than the price offered to the entire group of firms. All firms contracting with a particular HMO would pay the same premium. Finally, there was no guarantee that every health plan submitting an initial bid would be able to negotiate a contract with even one PBGH company.

Adjusting Premiums For Benefits And Risk Selection

The collective negotiation process evolved out of attempts by PBGH companies to understand the differences in premiums among HMOs in California. When they put their price data side by side, the PBGH firms discovered wide differences in the rates charged to different companies by the same HMOs, as well as in the rates charged by different HMOs. It was difficult to ascertain how much of the observed variance was due to legitimate differences in underlying costs. The structure of the collective negotiation process was designed to reduce this variance as the first step toward reducing the average level of HMO prices.

The variance in premiums among purchasers and HMOs in 1994, the year before the collectively negotiated prices took effect, can be decomposed analytically to the part attributable to differences in benefits, the part attributable to risk mix, the part resulting from differences in HMO efficiency, and a residual part comprising differences in prices charged by the same HMO to different firms with similar benefits and risk mix. This decomposition requires data on benefit packages and risk mix, plus a method for aggregating across plans and companies that negotiate prices using different tier structures. Some PBGH companies and HMOs negotiated three prices (single employee, employee plus one dependent, and employee plus two or more dependents), while others negotiated four prices (single employee, employee plus spouse, employee plus dependents, and employee plus spouse and dependents).

With eleven companies and fourteen HMOs, there were potentially 154 enrollee groups. However, each company severely restricted the number of HMOs with which it contracted. Only one HMO contracted with all eleven firms, and one had contracts with ten firms. The remainder contracted with four or fewer firms. Enrollment (employees plus dependents) across the resulting forty-four company/ HMO groups averaged 5,011, from a low of sixty-seven enrollees to a high of 34,277. There was wide variation among HMOs in total enrollment from all PBGH companies, with a range from sixty-seven to 83,626. The size of the PBGH companies, in combined

enrollment in all contracting HMOs, ranged from 1,714 to 96,132.

For purposes of this analysis, differences in benefit packages among PBGH companies and their contracting HMOs in 1994 were measured in terms of how much they differed from the standard benefit package that was mandated for all PBGH companies and HMOs in 1995. The PBGH hired actuaries to estimate the incremental annual expenditures associated with each element of the benefit package (for example, pharmacy and mental health benefits, and alternative levels of copayments). An index was constructed for each benefit package across the forty-four company/ HMO contracts, measured in terms of each contract's expected annual cost relative to the expected annual cost of the standard package. This index had a mean of 0.96 (most packages in 1994 were thinner than the standard adopted for 1995), with a range from 0.85 to 1.06.

Differences among PBGH companies and HMOs in enrollee risk mix were measured in terms of the expected annual per capita expenditures for each company/HMO enrollee group relative to the expected annual per capita expenditures for all PBGH enrollee groups. Expected expenditures for each enrollee group were based on enrollment data on age, sex, and tier (family) structure and on age-, sex-, and tier-specific expenditure weights. The enrollment data were obtained from the personnel files of the PBGH companies. The expenditure weights were obtained from Kaiser Permanente of Northern California, a large group-model HMO with a base enrollment of 2.5 million persons. Intuitively, the expected annual per capita expenditure measures the costs a group of PBGH employees and dependents would have incurred had they been enrolled with Kaiser. The validity of these demographic risk weights was evaluated by the PBGH using alternative risk weights based on self-assessed health status measures derived from employee surveys (in combination with demographic data). While the health status-based weights had a wider variance than the demographic weights, they produced very similar means and cardinal rankings for individual company/HMO enrollee groups. These weights could not be applied to the full PBGH risk analysis here since they require survey data that are available only for a subsample. The Kaiser-based demographic weights also were compared with expenditure weights from other HMOs and other states; similar results were produced by all. The risk index used in this analysis takes the value one for company/HMO enrollee groups with expected per capita expenditures equal to the enrollment-weighted mean for all forty-four groups, takes values less than one for groups benefiting from favorable risk selection, and takes values greater than one for groups suffering from adverse risk selection. The risk index ranges from 0.88 (one group had expected expenditures 12 percent below the average) to 1.17 (one group had expected expenditures 17 percent above the average).

Explained And Unexplained Variance In HMO Premiums

Exhibit 1 highlights the variance in HMO premiums charged to PBGH companies in 1994, the year prior to collective negotiations. The figures in the first three columns are the ratio of the maximum to the minimum premium charged per enrollee (employee or dependent) across all of the PBGH firms that contracted with each of the fourteen HMOs. The first column uses premiums as charged, without adjusting for differences among companies and HMOs in benefit packages or risk mix. The second column uses benefit-adjusted premiums (the unadjusted premium divided by the benefit index), and the third column uses benefit-adjusted and risk-adjusted premiums.

The ratio of maximum to minimum unadjusted premiums ranged from 1.00 to 1.56 among the fourteen HMOs. (For the six HMOs contracting with only one PBGH firm, the ratio equals one by construction.) HMO A, for example, charged one of the PBGH companies a premium per covered life that was 56 percent higher than that charged another PBGH company. Adjusting for differences in benefits and enrollee risk selection narrowed

Exhibit 1 Range And Evolution Of Annual Premiums Per Enrollee Charged To Eleven Firms Participating In Group Negotiations With Fourteen California HMOs, 1994-1995

	Annual premium per enrollee ^a			Percent premium
НМО	Unadjusted premium (1994)	Benefit-adjusted premium (1994)	Benefit- and risk- adjusted premium (1994)	reduction due to group negotiations (1994-1995) ^b
A	1.56	1.35	1.36	6.6%
B	1.26	1.13	1.15	8.3
C	1.13	1.13	1.15	11.7
D	1.13	1.19	1.10	-0.4 ^C
E	1.08	1.03	1.08	13.5
F	1.00	1.00	1.00	11.4
G	1.03	1.01	1.03	14.7
H	1.01	1.05	1.11	6.8
I J K	1.00	1.00	1.30 1.00	8.7 5.5 20.3
L	1.00	1.00	1.00	28.3
M	1.00	1.00	1.00	13.6
N	1.00	1.00	1.00	11.1

Source: Pacific Business Group on Health.

Note: HMO is health maintenance organization.

^a Ratio of maximum to minimum annual premium across all contracting firms.

^b Weighted average across all contracting firms.

^c Premium increase reflects substantial improvement in benefit package from 1994 to 1995.

this range but left considerable residual variation. In the case of HMO A, for example, differences in benefits and risk accounted for twenty of the fifty-six-percentage-point difference in premiums among PBGH companies, leaving a thirty-six-percentage-point difference unexplained. For some HMOs, adjustment for benefits and risk increased rather than decreased the variation in premiums among PBGH companies. This occurred in the few cases in which HMOs charged companies with rich benefits and high-risk employees a lower premium than they charged companies with thin benefits and low-risk employees. PBGH company managers attribute these apparently pathological pricing patterns to attempts by some HMOs to purchase market share by lowballing high-cost companies or, conversely, to charge high rates to price-unconscious low-cost companies.

The contributions of benefit packages, risk mix, volume of purchasing (enrollment size), and HMO efficiency to the total variance in 1994 premiums also were investigated using multivariate regression techniques. The estimated coefficients were all of the expected direction and were statistically significant. In general, premiums were higher for enrollee groups that had richer benefit packages and higher expected per capita expenditures. Premiums were lower for larger enrollee groups than for smaller enrollee groups, but the magnitude of this scale effect was modest. An addition of 1,000 enrollees was associated with a 1 percent reduction in premium. Approximately 30 percent of the variance in premiums among the fortyfour company/HMO contracts was attributable to differences in benefits and risk mix (adjusted R-square = 0.30), with an additional 4 percent attributable to differences in scale of enrollment. Thus, two-thirds of variance in premiums charged to particular firms was not attributable to differences in benefits, risk selection, or volume of purchasing. It also could not be attributed to significant differences in provider networks, since most major HMOs contract with most major medical groups in California and do not offer differentiated products to purchasers. This unexplained variance in prices among PBGH companies provided the most immediate target for collective negotiations.

Impact Of Group Negotiations On Prices And Payments

The percentage reductions in premiums negotiated by the PBGH from each HMO in 1995, shown in the final column of Exhibit 1, are computed relative to the average of the premiums charged by each HMO in 1994 to all of the PBGH firms with which it contracted, weighted by the size of each company's enrollment in that HMO. They encompass the upgrading in benefit packages that occurred in many HMOs and companies between 1994 and 1995 and thus understate the dollar-price changes actually

achieved by particular PBGH firms. The percentage price reductions range from zero (one HMO stood fast with its 1994 rates in 1995 while improving benefits) up to 28.3 percent. The greatest reductions occurred among HMOs that had charged the highest premiums in 1994 (bivariate correlation coefficient r = 0.56; p < .0l). This resulted in a 22 percent decline in the variance in HMO prices in 1995 compared with the variance in 1994. Volume of enrollment in 1994 was not associated with the magnitude of premium reductions among HMOs in 1995. To obtain insight into the aggregate price reduction for the PBGH as a whole, it is necessary to weight the HMO-specific reductions in Exhibit 1 by the PBGH enrollment in each HMO. This produces an enrollment-weighted average HMO premium reduction of 9.2 percent that is attributable to collective negotiations.

Exhibit 2 presents the range of health benefit payments among the eleven PBGH companies in 1994 and the range of savings among those companies attributable to collective negotiations in 1995. The 1994 figures are the average of premiums paid per year by each company across all of its contracting HMOs, weighted by enrollment in each HMO. They are calculated in terms of annual payments per covered life, based on tier-specific premiums and number of employees and dependents in each tier (single employee, employee plus spouse, and so on) for each company and HMO.

HMO benefit payments per covered life averaged \$1,758 annually across

Exhibit 2 Health Benefit Payments And Savings Among Eleven Large Employers In Collective Negotiations With Fourteen California HMOs, 1994-1995

Firm	Benefit-adjusted	Savings per	1995 savings
	payments per employee	employee or	as percent
	or dependent (1994) ^a	dependent (1995) ^a	of 1994 payments
A	\$1,699	\$121	7.1%
B	1,720	114	10.3
C	1 , 7 9 1	1 8 4	1 0 . 3
D	1,544	4	0.3
E	1,671	98	5.8
F	1,802	283	15.7
G	1,958	376	19.2
H	1,805	185	10.3
I	1,864	253	13.6
J	1,769	212	12.0
K	1,622	63	3.9
Employment- weighted average	\$1,758	\$161	9.2%

Source: Pacific Business Group on Health. **Note:** HMO is health maintenance organization.

^a Weighted average across all HMOs.

the eleven companies in 1994. The variation was attributable to differences in employee risk, choice of contracting HMOs, and the firm-specific premiums charged by the HMOs (that is, whether a firm was charged an aboveaverage or below-average premium by an HMO, compared with the premiums charged to other PBGH firms by that HMO). The savings achieved by each firm attributable to the collective negotiations in 1995 thus depended on whether it had been charged a high price or a low price by its contracting HMOs in 1994 and on the reduction in premiums charged by its HMOs to the PBGH as a whole in 1995. Total savings to the PBGH group of companies can be derived by weighting the company-specific savings by relative employment across companies. Savings for the 220,496 covered PBGH lives totaled \$36.5 million. In percentage terms, these payment reductions for buyers must equal the price reductions for sellers. The employment-weighted average savings for the eleven purchasers attributable to collective negotiations thus was 9.2 percent, the same as the enrollmentweighted average premium reduction for the fourteen HMOs.

Evolution Of Relations Among Purchasers And Providers

The successes achieved through standardization of benefits and risk and through group negotiation of premiums have spurred interest among employers in expanding the scale and scope of collective initiatives to manage competition in health care. Several firms that belong to the PBGH but that did not participate in the first round of collective negotiations are planning to participate in subsequent rounds. More importantly, other large employers on the West Coast have joined the PBGH. The presence of several new southern California firms will make the collective negotiations process a pairing of statewide HMOs with statewide employers. Also, the inclusion of firms in Oregon and Washington means that the PBGH is considering extending the collective negotiation process beyond California. The collective negotiations for 1996 include seventeen companies.

The scope of services also is expanding. The eleven firms that originally negotiated premiums just with HMOs are evaluating ways to achieve the same results with their self-insured point-of-service plans. Similar considerations affect the medical care component of the firms' workers' compensation programs, particularly the lack of strong provider network relations. The PBGH firms also are using the group negotiations process to cover retirees who are eligible for Medicare and obtain various forms of capitated supplemental coverage through their erstwhile employers. Expansion of the negotiation process is essential lest the gains obtained for the core health benefits program be lost through cost shifting by plans and providers onto workers' compensation, persons eligible for Medicare, persons enrolled in

point-of-service plans, and non-PBGH employers, Sustainable control over HMO premiums is achievable only if the delivery system is restructured, excess capacity is reduced, and incentives for efficiency enhancement are institutionalized. Decades of experience with cost and charge shifting by public payers such as Medicaid and Medicare have proved that price discounting without reduction in the underlying cost structure is an ineffective long-term strategy, even for the largest purchasers.

The expansion of group negotiations is raising fundamental questions concerning relations between purchasers and HMOs. Negotiations for premium reductions are widely perceived as the first step toward a pruning of the number of health plans offered by the PBGH firms, individually and collectively. While no firm dropped an HMO contract based on first-year results, many are actively evaluating their future options. Several HMOs slated for termination were retained only after offering double-digit premium reductions, thereby upping the ante for all HMOs in the next round of negotiations. If the number of different plans offered by member companies declines, the group negotiations process may begin to resemble group purchasing. At the limit, if all firms offered all the same HMOs, the PBGH would come to resemble CalPERS and the state purchasing pool for small private employers (Health Insurance Plan of California, or HIPC), both of which offer the same choice of health plans to all employees of all member firms. As individual firms gain bargaining leverage through the PBGH, some may consider adding more HMO choices.

The transition from group negotiations to group purchasing is not merely a matter of standardizing and expanding consumer options for choosing health plans; it potentially implies a fundamental change in the role of the PBGH as an organization. The HMOs could consider the PBGH, distinct from its member companies, more and more as a principal interlocutor for consideration of contractual matters that arise between negotiation periods. The PBGH already has assumed a leadership role with respect to adjusting the standard benefit package, deciding which forms of utilization and quality data HMOs must report, and evaluating the range of possible methods for risk-adjusting payments from particular companies and to particular HMOs. The accretion of new functions is triggering an expansion of staff capabilities at the PBGH. Member companies have built up managerial infrastructures to do some of the tasks that subsequently have been delegated to the PBGH. They now face a series of "make-versus-buy" decisions with respect to their roles as health insurance sponsors.

The collective negotiations and eventual pruning of HMOs also have important implications for relations between the PBGH and providers, including medical groups and hospitals, that deliver care under contract to HMOs. With the exception of Kaiser Permanente, which embodies a

vertically integrated structure of health plan, hospitals, and (via exclusive contract) medical group, California HMOs rely on networks of large medical groups to bear capitation risk, manage utilization, and provide data on performance. Hospital payment is channeled through medical groups or, in some cases, contracted directly by the HMO. Most of the major medical groups and hospitals contract with most of the major HMOs.'

As the PBGH has extended its activities to encompass demands for utilization and quality data and has conducted surveys of consumer satisfaction, the HMOs increasingly have delegated responsibility for compliance to their contracting medical groups and hospitals. The PBGH and its member companies are beginning to request performance data by medical group, rather than merely by HMO, to evaluate which provider networks they value most. In collaboration with the Unified Medical Group Association, they are designing a sampling frame for a consumer satisfaction survey based on medical group enrollment (as distinct from HMO enrollment) and including non-PBGH enrollees as well as PBGH enrollees.

Most pointedly, the PBGH is becoming concerned with the medical loss ratio for its contracting HMOs, which is the percentage of premium revenues that is actually devoted to medical care services as distinct from administrative overhead and HMO profits. These ratios hover over 80 percent in California, which is low in light of the fact that the provider organizations in California perform many of the administrative functions (for example, utilization management and contracting with subspecialists and with home health, nursing home, and tertiary care providers) that HMOs must perform themselves in states with less-developed medical groups. The HMOs are defending these medical loss ratios from the collective negotiations process by passing on the premium reductions demanded by the employers to the medical groups and hospitals in the form of proportionate reductions in capitation rates per member per month.

The medical loss ratio by itself is not a good indicator of efficiency or performance, since HMOs differ widely in which services are delegated to provider organizations and which are performed by the HMO directly. However, the PBGH and its member companies recognize that they must be vigilant lest the economies achieved through group negotiations result in access and quality problems at the physician/ patient interface. The goal is to develop methods for identifying the HMOs that offer the best value, defined in terms of access, quality, and price. The employers are beginning to meet with representatives of provider organizations separately from as well as collectively with representatives of the HMOs. They also are encouraging further alignment of particular provider organizations with particular HMOs. This form of product differentiation not only will permit easier comparisons among HMOs but also will stimulate a shift from price

competition among undifferentiated health plans to performance competition among integrated systems of care.

Conclusion

Experience outside the health care sector indicates that technologically dynamic industries that are subject to intense market pressure evolve toward close, "relational" contracting and away from arm's-length, "spot" contracting to facilitate product and process innovation. For fifty years health care has been technologically very dynamic. However, the lack of effective market pressures for cost control has permitted the persistence of a cottage industry structure linked through informal and episodic ties. Now, as price competition becomes intense, the organizational and contractual forms in health care are evolving to resemble those in the non-health care economy. Vendors are becoming partners, Autonomous organizations are consolidating into organizational networks. The price pressures exerted by collective negotiations are producing a fundamental transformation of both the markets and the organizations of health care.

This research was supported by The Robert Wood Johnson Foundation through its Investigator Awards in Health Policy Research (Grant no. 23494) and Health Care Financing and Organization (Grant no. 022538-HCO) programs. It benefited from extensive discussions with Patricia E. Powers, executive director, Pacific Business Group on Health, and from careful data preparation and analysis by Tracy Rodrigues and Karen Shore. Valuable comments on earlier drafts were obtained from Paul Fearer (Union Bank), Robin Wythe (Pacific Telesis), Tanya Bednarski (Chevron), and Arnold Milstein (William Mercer, Inc.).

NOTE

1. J.C. Robinson and L.P. Casalino, "The Growth of Medical Groups Paid through Capitation in California," *The New England Journal of Medicine* (21 December 1995).