Managed Competition In California’s Small-Group Insurance Market

While health care purchasing cooperatives may lower insurance premiums, they do not always solve problems of risk selection.

by Thomas C. Buchmueller

ABSTRACT: This paper describes the early experience of the Health Insurance Plan of California (the HIPC), a small-employer purchasing cooperative established in 1993. The plan’s experience is consistent with the predictions of advocates of market-oriented health care reform: The program’s design has encouraged cost-conscious choice by enrollees, which in turn has generated price competition among plans. Differences across the HIPC’s six rating regions conform with the notion that health care competition is less viable in sparsely populated areas. Evidence on risk selection suggests that while the HIPC as a whole has not experienced adverse selection, certain plans within the program have received a disproportionate share of high-cost enrollees.

More than a dozen states in recent years have enacted legislation enabling the establishment of health care purchasing cooperatives for small employers. California was among the first to do so by establishing the Health Insurance Plan of California (the HIPC) in 1993. This paper describes the experience of the HIPC in its first three years, with a particular focus on trends in enrollment, premiums, and competition among participating plans. While data limitations preclude a rigorous statistical analysis, these descriptive findings are useful for understanding the role of purchasing cooperatives in the small-group insurance market.

Design Of The HIPC

California’s HIPC was one component of small-group health insurance reform legislation that went into effect in July 1993. California Assembly Bill (A.B.) 1672 prohibits insurance carriers from denying health insurance coverage to firms with three to fifty full-time employees, from canceling such coverage, and from excluding pre-existing medical conditions for more than six months. Initially, premiums were required to fall between 80 and 120 percent of a stan-
standard age-rated premium for a given benefit design. Beginning in July 1996 the rate bands tightened to plus or minus 10 percent.

A.B. 1672 also established the HIPC. The overarching goal was to provide employees of small firms with health benefits that were similar in cost and quality to those enjoyed by employees of larger firms. The HIPC is managed by the California Managed Risk Medical Insurance Board (MRMIB), an independent public agency created in 1989 to manage the state’s high-risk insurance pool. The basic administration of the HIPC is subcontracted to a private firm based on competitive bidding, so that the MRMIB staff can remain small and focused on broader policy issues.

Although a uniform set of rules applies statewide, the state is divided into six regions for the purpose of setting premiums. Carriers need not offer coverage in all six regions but must offer coverage in their entire licensed service area. Although a large number of insurers offer plans through the HIPC, access to the program is not automatic. Rather, it is the outcome of negotiations between the plans and the MRMIB. In the first year, twenty health plans participated in the HIPC; by the third year, twenty-eight did so.

HIPC eligibility is limited to firms with three to fifty employees, the same size as covered by the general insurance market reforms. Eligibility is limited to full-time employees, and a 70 percent minimum participation rate is required. Employers must contribute at least half of the lowest single-coverage premium.

In the HIPC’s first three years, participating employees chose from a set of health maintenance organizations (HMOs) and preferred provider organizations (PPOs). Each type of plan has two levels of benefits: standard and preferred. Standard coverage entails greater out-of-pocket costs when care is received. Premiums vary only by age (seven categories), family size (four categories), and geographic region, and carriers are prohibited from selling the same coverage at a lower premium outside the HIPC.

**HIPC Enrollment**

In the HIPC’s first three years, new enrollment averaged 211 employer-sponsored groups per month. As of 30 June 1996 (the end of the third year) 6,000 small groups representing a total of 62,648 employees and 49,777 dependents were enrolled in the HIPC. This represents roughly 2 to 3 percent of all eligible firms. The most notable characteristic of firms that chose the HIPC is that they are quite small: The mean group size is ten employees, and 94 percent have fewer than twenty-five employees.

One of the main goals of A.B. 1672 was to increase health insurance provision by small employers. The underwriting reforms that
apply both within and outside the HIPC were intended to reduce barriers faced by small firms. In addition, by exploiting administrative economies of scale and encouraging price competition among participating plans, the HIPC aimed to reduce the cost of insurance and thereby increase coverage.

There is some evidence that the percentage of small California employers offering health insurance increased slightly in the two years following the enactment of A.B. 1672. Estimates based on surveys conducted in 1993 (just prior to the enactment of A.B. 1672) and in the summer of 1995 suggest that insurance provision among firms with three to nine employees increased from 47 percent to 57 percent. Provision rates remained essentially constant for larger firms.

It is unclear how much of this increase can be attributed directly to A.B. 1672 and how much is related to other factors. The past several years have been a period of intense price competition in health insurance markets, particularly in California. This competition is surely part of the explanation for the increase in coverage. Improvements in the economy may be another. The enactment of A.B. 1672 coincided roughly with the trough of one of the deepest recessions in California history. Since then, California has experienced a slow but steady recovery.

As difficult as it is to disentangle the effects of A.B. 1672 from other changes occurring in California, it is even harder to distinguish the effect of the HIPC from that of other small-group reforms. However, the low market share of the HIPC, combined with the fact that 80 percent of firms enrolled in the HIPC had offered insurance previously, suggest that its direct effect on insurance coverage has been negligible. This conclusion underscores the argument that health care reform initiatives based on voluntary private behavior can have only a limited impact on covering the uninsured.

**Premium Levels And Trends**

A basic measure of the HIPC’s performance is the premiums charged by participating plans, particularly in comparison with those of the outside market. Exhibit 1 presents information on average HIPC premiums for each of the first three contract years. In the first year, average monthly single-coverage premiums for standard HMO and standard PPO coverage were $132 and $136, respectively. According to an analysis by program administrators, initial HIPC rates were 10 to 15 percent below standard rates for comparable coverage available in the general small-group market.

Mean PPO and HMO premiums fell in the second year by 4 percent and 11 percent, respectively. Health care costs were falling over this period for other California employers as well. Average pre-
miums paid by the California Public Employees Retirement System (CalPERS), the large public employee purchasing group, fell by 1.1 percent. Other large employers, such as Stanford University, the University of California, and members of the Pacific Business Group on Health, saw their premiums fall by between 6 and 9 percent. In the third year, HIPC HMO premiums fell by an additional 5 percent. Again, this decline is comparable to the experience of other large California purchasers and slightly larger than changes reported for HMOs nationwide.

These trends suggest that HIPC premiums, at least those for HMOs, remained competitive with the outside market. Indeed, there is anecdotal evidence that the public availability of HIPC rates has increased price competition in the rest of California’s small-group market.

In the third contract year, two of three PPOs exited the HIPC, and one new PPO entered. The incumbent PPO raised its rates, and the entrants’ rates were far higher than those of other plans. As a result, whereas PPO premiums were initially comparable to those of the HMOs, by the 1995/1996 plan year mean PPO premiums were 37 percent higher. Similarly, whereas in 1993/1994 the lowest-cost PPO was among the three lowest-cost plans available in four regions, by

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**EXHIBIT 1**

Trends In “Employee-Only” Premiums, By Plan Type, 1993–1996

<table>
<thead>
<tr>
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<tbody>
<tr>
<td></td>
<td>Standard HMO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean premium</td>
<td>$131.90</td>
<td>$117.33</td>
<td>$110.83</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>$102–162</td>
<td>$95–144</td>
<td>$92–153</td>
<td></td>
</tr>
<tr>
<td>Number of plans</td>
<td>64</td>
<td>78</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preferred HMO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean premium</td>
<td>$145.48</td>
<td>$130.17</td>
<td>$123.67</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>$118–176</td>
<td>$110–163</td>
<td>$107–166</td>
<td></td>
</tr>
<tr>
<td>Number of plans</td>
<td>64</td>
<td>79</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard PPO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean premium</td>
<td>$136.31</td>
<td>$130.37</td>
<td>$151.75</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>$97–195</td>
<td>$102–195</td>
<td>$112–184</td>
<td></td>
</tr>
<tr>
<td>Number of plans</td>
<td>18</td>
<td>18</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Preferred PPO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean premium</td>
<td>$150.01</td>
<td>$143.31</td>
<td>$169.36</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>$106–208</td>
<td>$111–204</td>
<td>$123–202</td>
<td></td>
</tr>
<tr>
<td>Number of plans</td>
<td>18</td>
<td>18</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**SOURCE:** The Health Insurance Plan of California.

**NOTES:** HMO is health maintenance organization; PPO is preferred provider organization. The figures represent composite premiums that are calculated as a weighted average of seven age-group premiums, where the weights are the percentage of total HIPC enrollment in each age group. Separate composite premiums are calculated by carrier, coverage type (standard or preferred), and region. The HIPC contract year runs from 1 July to 30 June. Thus, 1993/1994 refers to the period from 1 July 1993 through 30 June 1994, and so on.
1995/1996 there were between twenty-five and thirty-five HMO options whose premiums were lower than those of the lowest-cost PPO.

Given these premium differentials, it is not surprising that by the third year more than 90 percent of HIPC enrollees were in HMOs. Interestingly, however, a slight majority of HMO enrollees chose preferred, rather than standard, coverage. (Preferred plans, which provide slightly more generous coverage, cost about $13 more per month than standard plans cost.) Thus, although HIPC enrollees appear to be fairly price-sensitive, the monthly premium is not the only factor that influences their choice.

**Regional Differences In Competition**

Richard Kronick and colleagues argue in a recent paper that market-oriented strategies for controlling costs are not viable in markets that are not large enough to support several competing HMOs and in which the provider market is highly concentrated. Although the majority of Californians live in urban or suburban areas, the state has vast areas that are quite sparsely populated. The configuration of the HIPC’s six rating regions makes it possible to consider Kronick and colleagues’ conjecture by comparing the HMO premiums in urban regions with those in regions made up of less populated rural areas.

As shown in Exhibit 2, slightly more plans were available in the more urban regions than in the largely rural Region 1 in 1995/1996. This comparison actually understates the differences across the regions, because there are several counties within Region 1 where only one or two HIPC plans were available in 1995/1996 and some counties where no plan was available. An average of 3.6 plans operated in any county within Region 1. Thus, to the extent that markets with fewer competitors are less price-competitive, we should expect Region 1 to be less competitive than the other regions.

All else being equal, a stronger relationship between price and market share, as well as lower average prices, should point to greater competition. In the case of the HIPC, changes in prices over time also are informative. In the first year, participating plans set rates with relatively little information on the rates of their competitors. As this information is revealed, we would expect premiums to decline the most (or increase the least) in the most competitive markets as plans compete for market share. In contrast, in more concentrated insurance markets, carriers will have less reason to lower rates.

Regional differences in premium trends also will reflect conditions in the broader health care market. The first three years of the
HIPC were a period of heightened competition in all areas of health care. If provider competition increased mainly in urban areas, we would expect health care costs (and hence premiums) in such markets to fall relative to those in more concentrated rural markets.

In the HIPC’s first year the carrier with the lowest HMO premiums, Aetna, had the highest market share. While Aetna’s rates remained constant between the first and second year, its competitors lowered their rates aggressively. For example, between 1993/1994 and 1995/1996 Kaiser South lowered its standard coverage premium in Region 5 from $28 more than Aetna’s to $10 less, and in the process, it became the region’s market share leader. Overall, average HMO premiums in Region 5 fell by almost 22 percent between 1993/1994 and 1995/1996 (Exhibit 3). Premiums fell by 16 percent and 17 percent, respectively, in the two other heavily urban regions (Regions 3 and 4) and by a slightly lesser amount in the largely urban Regions 2 and 6.

Region 1, the demographic outlier, is unique in premium trends as well. Premiums for HMOs available in both 1993/1994 and 1995/1996 fell in Region 1 by roughly 8 percent, compared with a decline of 15 percent elsewhere. As a result, although HMO premiums in Region

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**EXHIBIT 2**


<table>
<thead>
<tr>
<th>HIPC region</th>
<th>Counties</th>
<th>Description</th>
<th>Population per square mile</th>
<th>Percent of population in urban area</th>
<th>Number of plans in 1995/1996</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30 counties, mostly in northern and central California</td>
<td>Rural, sparsely populated</td>
<td>31.3</td>
<td>30.3%</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>14 counties in central California</td>
<td>Mixed urban and rural</td>
<td>138.3</td>
<td>66.8</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>San Francisco Bay area</td>
<td>Urban</td>
<td>1,392.6</td>
<td>97.9</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>3 southern California counties: Orange, Santa Barbara, and Ventura</td>
<td>Urban/suburban</td>
<td>641.8</td>
<td>96.0</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>Los Angeles County</td>
<td>Urban</td>
<td>2,183.1</td>
<td>99.0</td>
<td>19</td>
</tr>
<tr>
<td>6</td>
<td>3 southern California counties: Riverside, San Bernardino, and San Diego</td>
<td>Mainly urban/suburban; some rural areas</td>
<td>161.8</td>
<td>86.2</td>
<td>17</td>
</tr>
</tbody>
</table>

**SOURCES:** The Health Insurance Plan of California; and 1990 U.S. Census.
were initially comparable to those in the other regions, by 1995/1996 they were roughly $10 higher per month.

Region 1 also stood apart from the others in terms of the relationship between price and market share in March 1996 (Exhibit 4). The majority of enrollees in Regions 2 through 6 were in plans with monthly premiums falling within $20 of the lowest-cost plan, and the carrier with the lowest premiums (averaged over the two benefit designs) in Regions 2, 3, 5, and 6 had the greatest market share. In contrast, low-cost plans had a much smaller share of the market in Region 1. There, the monthly premium for the plan with the greatest market share was $55 higher than the region’s lowest-cost plan. It is interesting that between 1993/1994 and 1995/1996, the two plans with the greatest market share in Region 1 increased premiums there, while at the same time lowering premiums in the other HIPC regions. This divergence may reflect differences in the level of competition in the insurance market or the underlying market for medical services. Either way, these data provide some support, albeit informal, for the conjecture of Kronick and colleagues.

Biased Risk Selection Under Managed Competition

In a program like the HIPC, purchasing decisions are made at two levels, and biased risk selection is a potential problem at both. First, there is the employer’s decision to participate in the cooperative. If underwriting practices used outside the pool penalize high-risk firms more than those used inside the pool, firms that are more (less) costly to insure will be more (less) likely to choose the purchasing...
cooperative. In the worst-case scenario, this would lead to an adverse selection “death spiral,” which would turn the cooperative into a high-risk pool or force it out of business.

The HIPC’s most important protection against adverse risk selection is that it was established within the context of greater market reforms. The limits on exclusions for preexisting conditions and the rules on guaranteed issue and renewability apply to the entire small-group market. Although premiums are allowed to vary more outside the HIPC than within it, the variation is constrained by the rate bands introduced as part of A.B. 1672. The prohibition on HIPC carriers’ underpricing their HIPC plans in the outside market further reduces the potential for biased selection.

There is no evidence that small groups enrolled in the HIPC are, on average, more costly to insure than those insured in the general market. The average age of HIPC enrollees was actually lower in the first year than the program’s actuaries had expected. The entry of several new carriers in subsequent years and the fact that HIPC premiums have declined by as much as or more than those in the general market suggest that carriers do not view the HIPC as being plagued by adverse selection.

The second level of decision making occurs when individual employees select among competing plans. The experience of other large multiple-option insurance programs suggests that without an adequate process for risk adjustment, adverse selection may drive certain plans from the market. Although the HIPC’s design incorpo-

**EXHIBIT 4**
Plan Market Shares, By Health Insurance Plan Of California (HIPC) Region, March 1996

<table>
<thead>
<tr>
<th>Type of plan</th>
<th>Market share per HIPC region</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Plan with the lowest premium</td>
<td>5%</td>
</tr>
<tr>
<td>Plans within $10 of low-cost plan</td>
<td>7</td>
</tr>
<tr>
<td>Plans within $20 of low-cost plan</td>
<td>20</td>
</tr>
<tr>
<td>Carrier with lowest average premium</td>
<td>14</td>
</tr>
<tr>
<td>Lowest-cost carrier has greatest market share?</td>
<td>No</td>
</tr>
</tbody>
</table>

**SOURCE:** The Health Insurance Plan of California.
**NOTES:** Standard and preferred health maintenance organizations (HMOs) from the same carrier are treated as separate plans. The lowest-cost plan in all regions is a standard-coverage HMO. The low-cost carrier is determined by averaging premiums for standard and preferred coverage.
rates strategies to minimize the problem of biased risk selection, it appears that within the HIPC, PPOs have attracted a disproportionate share of higher-risk persons.\textsuperscript{20}

Direct evidence of this comes from an analysis done by the MRMIB.\textsuperscript{21} Using claims data from participating carriers, the MRMIB compared plans in terms of number of enrollees with high-cost “marker diagnoses.” The two PPOs that were evaluated had “risk assessment values” for these diagnoses that were 20 percent and 34 percent above the mean for all plans.\textsuperscript{22} The large increase in the ratio of PPO to HMO premiums as well as the exit of two PPOs after the second rating year provide corroborating evidence that HIPC PPOs have experienced adverse selection.\textsuperscript{23}

**Conclusions**

The HIPC resembles the kind of health plan model that advocates of managed care competition have been endorsing for years. Results from the HIPC’s first three years are consistent with many of these advocates’ predictions: When choices are structured appropriately, individuals will make cost-conscious decisions, and health plans will compete on the basis of price.

However, there are two important caveats to this conclusion. First, differences across the HIPC’s six rating regions are consistent with the argument that competition among managed care plans works best in densely populated areas. In urban areas where HIPC enrollees have many plans to choose from, price appears to be an important determinant of plan market share. In contrast, although the HIPC is also available in California’s most rural counties, the choices there are much more limited, and price appears to matter less.

Second, along with freedom of choice comes the possibility of biased risk selection. Early evidence from the HIPC suggests that persons with higher expected medical expenses prefer PPO plans, which typically offer fewer restrictions on the use of care than do HMOs. The result has been that two PPOs have left the program, and those remaining have raised premiums substantially. This suggests that without some type of risk adjustment, less restrictive plans will have difficulty competing in a managed competition environment.

At the start of the 1996/1997 contract year, the MRMIB implemented a process for transferring funds among competing plans to account for differences in risk selection. As part of this process, the seven plans with the lowest-risk enrollees (all HMOs) were required to pay into a fund used to compensate two plans (PPOs) that had attracted a disproportionate share of high-cost enrollees. Seven-
teen plans were unaffected; the amount ultimately transferred repre-
represented slightly more than 1 percent of total premiums for the
entire program. Whether or not this risk adjustment is effective in
mitigating the problem of adverse selection while maintaining the
incentives for vigorous price competition remains to be seen. The
outcome of the HIPC’s efforts in this area has important policy
implications and is an important topic for future research.

The research for this paper was supported by The Henry J. Kaiser Family Foundation.
The author thanks Sandra Shewry of the MRMIB for providing data on the HIPC
and for her valuable comments and suggestions, and Cathy Hoffman for providing
useful feedback. Any remaining errors are the author’s.

NOTES
1. For more detail, see T.C. Buchmueller, “State-Sponsored Health Insurance
Purchasing Cooperatives: California’s ‘HIPC,’” in Competitive Managed Care: The
Emerging Health Care System, ed. J.D. Wilkerson, K.J. Devers, and R.S. Given (San
2. The lower bound will drop to two employees 1 July 1997.
3. Point-of-service plans were introduced to the HIPC menu in July 1996. Dental
coverage has been available since July 1994.
4. Standard HMOs have higher copayments for an office visit ($15 versus $5).
Standard and preferred PPOs have the same coinsurance rates but different
annual deductibles ($500 versus $250).
5. D. Lipson and J. De Sa, The Health Insurance Plan of California: First Year Results of a
Purchasing Cooperative (Washington: Alpha Center, 1995).
a Competitive Managed Care Market: The Case of California, 1993 to 1995,”
7. S. Findlay, “California: Edgy at the Cutting Edge,” Business and Health (July
1995): 36–43; A.C. Enthoven and S.J. Singer, “Managed Competition and Cali-
fornia’s Health Care Economy,” Health Affairs (Spring 1996): 39–57; and R.H.
8. Federal Reserve Bank of San Francisco, Western Economic Developments (March
9. Since premiums vary by age, region, and coverage type, there actually are
dozens of premiums for each carrier. All of the premiums reported in this
paper are composite (weighted average) premiums for “employee-only” cover-
age. Age-specific premiums are weighted by the percentage of all HIPC en-
rollees in each age category. Separate composite premiums are calculated for
each plan in each region. Thus, for a carrier offering standard and preferred
HMO coverage in all six regions, I calculate twelve composite premiums.
11. Enthoven and Singer, “Managed Competition and California’s Health Care
Economy.”
13. According to a representative of Blue Cross of California, a carrier that chose
not to participate in the HIPC, competition from the HIPC forced Blue Cross
to lower its premiums twice between 1993 and 1994. See M. Quinn, “Califor-
nia’s Health Pool: Limits, but Lower Rates,” *The New York Times*, 11 June 1994. Alain Enthoven and Sara Singer also claim that the HIPC has made California’s general small-group market more competitive. Enthoven and Singer, “Managed Competition and California’s Health Care Economy.”


15. This figure represents a population weighted average of the number of plans available throughout each county and does not include plans that are available in only part of a county. Weighting such plans by 0.5, the average number of plans available is 5.3.


17. The difference between Region 1 and the other five regions is statistically significant at the 2 percent level. The difference between Region 5 and Regions 2, 3, 4, and 6 is also statistically significant, although differences among the latter four are not.

18. Lipson and De Sa, *The Health Insurance Plan of California*.


23. It is interesting that Aetna, one of the carriers withdrawing its PPO, continues to offer an HMO in the HIPC. This suggests that Aetna views the HMO component of the HIPC favorably compared with the general market but finds the PPO component to be unprofitable, presumably because of risk selection issues.