

# HEALTH CARE PURCHASING

AMONG PRIVATE  
AND  
PUBLIC  
EMPLOYERS IN

# CALIFORNIA



JSI Research and Training Institute, Inc.



# About the Authors

---

**James Maxwell** is Director of Health Policy and Management Research at JSI Research and Training Institute in Boston, MA. He received his Ph.D. in Public Policy and post-doctoral training in Health Economics and Management from the Massachusetts Institute of Technology (MIT). Dr. Maxwell is nationally known for his work on health insurance and financing issues. During the past six years, he has directed studies of health insurance and purchasing practices among *Fortune* 500 companies, manufacturing firms, state governments, and California's largest private and public employers. His articles have appeared in a variety of health policy and management journals, and his work has been covered extensively in the media, including the *New York Times*, Bloomberg Radio, AP Radio, Reuters, Cox, *Crains New York Business*, AMA News, and *American Psychiatric Association News*.

**Tanaz Petigara** received a BA in International Relations and Anthropology from Wellesley College. She is currently a research associate at Brigham and Women's Hospital working on health care purchasing and insurance issues.

**Sonya Blesser** received a BS in Economics from MIT. She is currently a research associate at JSI Research and Training Institute working on health care purchasing and insurance issues.

**Cindy Meng** is a medical student at the University of New England College of Osteopathic Medicine. She received a masters degree in Business Administration with a concentration in Health Care Management and a masters degree in Medical Sciences from Boston University.

**Peter Temin** is Elisha Gray II Professor of Economics at MIT, having been a full professor in the Economics Department at MIT since 1970. He received his Ph.D. in Economics from MIT in 1964. Professor Temin's fields of specialization are industry studies and economic history. His work has included studies of the economics and economic history of the health care and pharmaceutical industry in the United States.

Research for this project was conducted at JSI Research and Training Institute in Boston, Massachusetts. JSI is an organization committed to improving public health both in the United States and around the world. JSI conducts research in health policy as well as a variety of clinical topics. It carries out programs on AIDS, mental health, substance abuse, aging, access issues, managed care, and health care financing.

JSI has offices in Boston, Washington D.C., Denver, and New Hampshire, as well as in twenty-eight countries abroad.

### **Acknowledgements**

This work was made possible by funding from the California HealthCare Foundation. The authors thank Eugenie Coakley for her statistical expertise, Rachel Kohn and Stephen Lemuth for their management of the survey, and the dedicated team of interviewers at JSI: Bob Hickey, Harvey Hoffenburt, and Nancy Politzer. The authors also thank members of the study advisory committee for their advice and guidance: Beau Carter, Tom Davies, Alain Enthoven, Jim Franklin, Michele French, Emma Hoo, Vivian Maguire, Marian Mulkey and James Robinson. We especially thank Allen Feezor, Peter Lee, and Nancy Vaughan, also members of the study advisory committee, for their comments on an initial draft of this report. We also appreciate the generosity of all the busy executives who donated their time and experience to the study.

# I. Table of Contents

---

<b>I. Executive Summary</b> .....	4
<b>II. Methods Overview</b> .....	7
<b>III. Health and Drugs Costs</b> .....	10
<b>IV. Approaches to Purchasing Health Care</b> .....	15
<b>V. Carrier Choice and Product Options</b> .....	18
<b>VI. Contribution Levels and Contribution Strategies</b> .....	20
<b>VII. Drug Costs</b> .....	24
<b>VIII. Quality Measurement and Management</b> .....	26
<b>IX. Wellness and Disease Management</b> .....	31
<b>X. Comparison of California and Non-California Employers</b> ...	35
<b>XI. New Strategies</b> .....	36
<b>XII. Conclusion</b> .....	38
<b>XIII. Footnotes</b> .....	40

# I. Executive Summary

---

This report presents the findings from a comprehensive survey of health benefits strategies among 318 of California's largest private and public employers.

Conducted by researchers at the JSI Research and Training Institute, and the Massachusetts Institute of Technology, the survey attained a response rate of 85 percent. The survey was later supplemented by in-person interviews with large employers and all major health insurance carriers operating in the state.

Over the last three years, health care costs have risen at double-digit rates in California and nationally, with only moderate relief expected in the future. Large California employers confront these increases in the midst of a continuing economic downturn and the state's worst fiscal crisis in decades. We found that more than 60 percent of large employers in California experienced increases in health care costs of more than 13 percent in the last year. Eighteen percent experienced more than 20 percent increases in health care costs. The provision of health benefits is a more costly task for public sector employers. We found that the average annual cost for health care was 20 percent higher for public employers than private employers in California. Public employers also experienced higher annual increases in health care costs than did private employers.

While no large employer is immune to cost pressures, some purchasing strategies hold promise for managing costs. We found lower costs to be associated with higher HMO penetration, selection of regional rather than national carriers, and lower employer contributions to individual coverage. Other factors such as age of workforce, and the extent of unionization, were also associated with costs, but are largely outside the managerial control of large employers.

Most large employers purchased health benefits with the help of brokers and consultants, using a competitive bidding process. During the 1990s, large employers successfully leveraged their size to obtain lower rates from health carriers. While they still negotiate aggressively over carrier rates today, they are less able to achieve comparable results. Health benefit managers in our survey attributed their declining purchasing leverage to mergers among health carriers and large hospital systems. Employers have contributed to this consolidation by reducing the number of carriers offered to employees. The average large employer in California offered two to three carriers to their employees, and was more likely to drop than add carriers.

Large California employers have shifted costs to employees through lower

employer contributions. Between 1999 and 2002, private and public employers each reduced their contributions to individual coverage by 2 percent. Together with rising premium costs, the reduction in employer contribution levels leads to larger out-of-pocket costs for employees. Large employers contributed an even smaller amount to family coverage. We found that thirty-four percent of private employers contributed less than 75 percent to family coverage. Public employers are significantly more generous in their contribution to individual coverage than private employers. Eighty-one percent of public employers contributed between 90-100 percent to individual coverage, compared to 28 percent of private employers. Thirty percent of private employers set contribution levels at 79 percent or below, compared to only 9 percent of public employers.

Quality measurement and management is well institutionalized among large California employers, but remains a secondary concern to costs. Large California employers routinely collected quality information, and used it to set performance standards in their contracts with health carriers. A few large employers participate in new quality programs that measure provider, rather than health carrier, performance. For example, some programs evaluate and reward provider groups financially for superior quality performance.

Large employers are devoting greater attention and scrutiny to wellness and disease management programs that encourage healthy behavior, and target high-risk and chronically ill employees. Large employer groups such as the California Public Employees' Retirement System (CalPERS) and the Pacific Business Group on Health (PBGH) have recently established performance measures for their carriers and external vendors to meet. These employers believe that wellness and disease management programs have the potential to decrease worker time lost to illness and disability, and increase worker productivity.

Ninety-two percent of private employers in our sample were national firms with employees across the country. We found that private employers with a greater percentage of their workforce in California were more likely to adapt their purchasing strategies to the California environment. Those employers were more likely to contract with regional than national carriers, and had more employees enrolled in HMOs. The continued commitment to HMOs is also reflected in higher employer contribution levels and lower levels of co-payments that characterize HMO products.

Though cost increases are expected to continue well above the consumer price index, the response of large employers has been incremental. They are more likely to introduce incremental changes in premium contributions, benefits design, and program administration. Though a few large private employers have implemented new insurance products such as consumer driven health plans and tiered

---

hospital networks, their approach has been cautious. These employers have yet to mandate participation in new insurance products or provide strong financial incentives that would encourage a rapid employee migration to those plans.

Large California employers may not, however, have to depend entirely on their own actions to address the cost crisis. The health benefits strategy of large employers will continue to be influenced by government policy as well as market conditions. Legislation at the federal and state levels could bring rate relief to beleaguered California employers. Federal legislation for expanding drug coverage in the Medicare program could potentially reduce large employer liabilities, among those currently offering retiree coverage. Similarly, in California, SB2 mandates employers with more than 20 workers to offer coverage to employees, or pay into a statewide fund. This could reduce the sizeable subsidies large employers pay for family coverage of spouses working in small firms.

The purchasing strategies of large employers are an important benchmark for employers of all sizes. Small and medium sized employers are likely to follow the lead of their larger counterparts. The health benefits strategy of all employers will continue to be influenced by these market leaders, as well as by changing government policy.

## II. Methods Overview

---

Data for this study of private and public employer groups in California were collected during fall 2002 through spring 2003. Our primary research instrument was a 30-minute telephone survey that targeted officials with the most responsibility and detailed knowledge of health benefits. In-depth in-person interviews were also conducted with employers, consultants, and all the major health insurance carriers in California.

We surveyed 318 out of 374 employers for a response rate of 85 percent, much higher than comparable employer surveys. Employers were classified as private employers if they were companies that were either privately-held or publicly-traded. Agencies that do not contract with the California Public Employees' Retirement System (CalPERS) such as local governments, state universities, community colleges, or school districts were classified as public employers. CalPERS and those entities that contract with it were considered to be one case within the public agency sample. Medical centers, county hospitals, and multi-hospital systems were classified as hospitals. During data collection, we separated hospitals from private and public employers because they differ in their health benefits purchasing due to their role as both suppliers and providers of health care. In this report, we excluded hospitals in some data comparisons due to the small sample size.

We relied upon many of the same measures used in our earlier studies of state governments, manufacturing firms, and the *Fortune* 500. Our surveys included questions on carrier choice, health plan types, contribution levels, supplier relations strategies, bidding practices, quality measurement and management, and emerging strategies to contain costs and to maintain quality.<sup>1</sup>

Employers are categorized into four groups based upon the number of employees in California: 1) 500-1,499 employees 2) 1,500-2,999 employees 3) 3,000-9,999 employees and 4) 10,000 employees or more. Nearly one-third of all employers in our sample employed 3,000-9,999 employees. Fifty-seven percent of public employers and 56 percent of hospital systems had 3,000 or more employees. The majority of private employers had between 500- 2,999 employees in California.



Large private and public employers in our survey purchase health benefits on behalf of 3,349,155 employees in California, and millions more dependents and retirees. Since large employers provide a high percentage of spousal and family coverage, they purchase health benefits for nearly one-quarter of the over 15 million workforce in California. <sup>2</sup>

Ninety-two percent of private employers in our sample were national employers with employees across the country. On average, those employers had a larger workforce outside of California. In addition to their California employees, we collected health benefit data on their 3,449,282 employees in other states, who account for 75 percent of their total workforce. Twenty-five percent of their total workforce, or 1,139,805 employees, are based in California. Within these employers, the ratio of employees based in California to employees in other states remained constant across all size categories.

TYPE OF EMPLOYER	SIZE BY NUMBER OF EMPLOYEES				TOTAL
	500-1,499	1,500-2,999	3,000-9,999	>10,000	
<b>PRIVATE</b>					
# of employers	54	58	60	32	204
% of employers	26%	28%	29%	16%	100%
<b>PUBLIC</b>					
# of employers	11	25	30	19	85
% of employers	13%	29%	35%	22%	100%
<b>HOSPITAL</b>					
# of employers	1	10	9	5	25
% of employers	4%	40%	36%	20%	100%
<b>TOTAL</b>					
# of employers	66	93	99	56	314*
% of employers	21%	30%	32%	18%	100%

\*Four employers did not report employee size.

## Characteristics of Employees in Large California Firms

Public employers purchase health benefits for a larger workforce in California than do private employers or hospitals. The average public employer purchased health benefits for 12,656 active employees, more than twice the average among private sector employees. The average hospital purchased for 7,136 employees. The average age of public sector employees was slightly higher than the average in the private sector.

Three-quarters of public sector employees were unionized compared to less than one-fifth among the private sector and hospital workforces. Public employers also had a greater average number of retirees enrolled in their health insurance programs. Their retirees were slightly younger than retirees in the private sector.

CHARACTERISTICS OF CALIFORNIA EMPLOYEES	PRIVATE	PUBLIC	HOSPITAL
<b>Average number of active employees</b>	5,587	12,656	7,136
<b>Average age of employees</b>	38	43	43
<b>Percent of workforce unionized</b>	11%	76%	17%
<b>Average # of retirees enrolled</b>	970	2,384	46
<b>Percent of those retirees &gt; 65 years</b>	49%	46%	40%

### III. Health and Drug Costs

The provision of employee health benefits is an increasingly difficult task for employers in California and across the country. Health care costs have risen at double-digit rates over the past three years, with only moderate relief expected in the future. These increases have significant economic consequences for employers. Health benefits have become an even larger share of total compensation, threatening employers' ability to remain profitable and competitive.<sup>3</sup>

Large California employers confront rising health care costs in the midst of a continuing economic downturn and the state's worst fiscal crisis in decades. Ninety-one percent of survey respondents reported rising health care costs as their greatest challenge in the coming year. Many employers in our sample felt compelled to choose between reducing health benefits or increasing employee cost sharing in their effort to reduce total health care costs.

Health care benefits have become the leading collective bargaining issue in California and across the country. The growing turmoil faced by large California employers is apparent in recent labor-management conflict over health benefits among grocery workers from Ralphs, Vons, and Albertsons, the Metropolitan Transportation Authority mechanics from the Mechanics Amalgamated Transit Union, and United Transportation Union bus and rail operators.<sup>4</sup>

*“Next year, we will experience a 22% increase in premium costs. We are unable to cover this with our existing budget. In order to cover everyone, we will have to reduce cost of living increases or lay off employees.”*

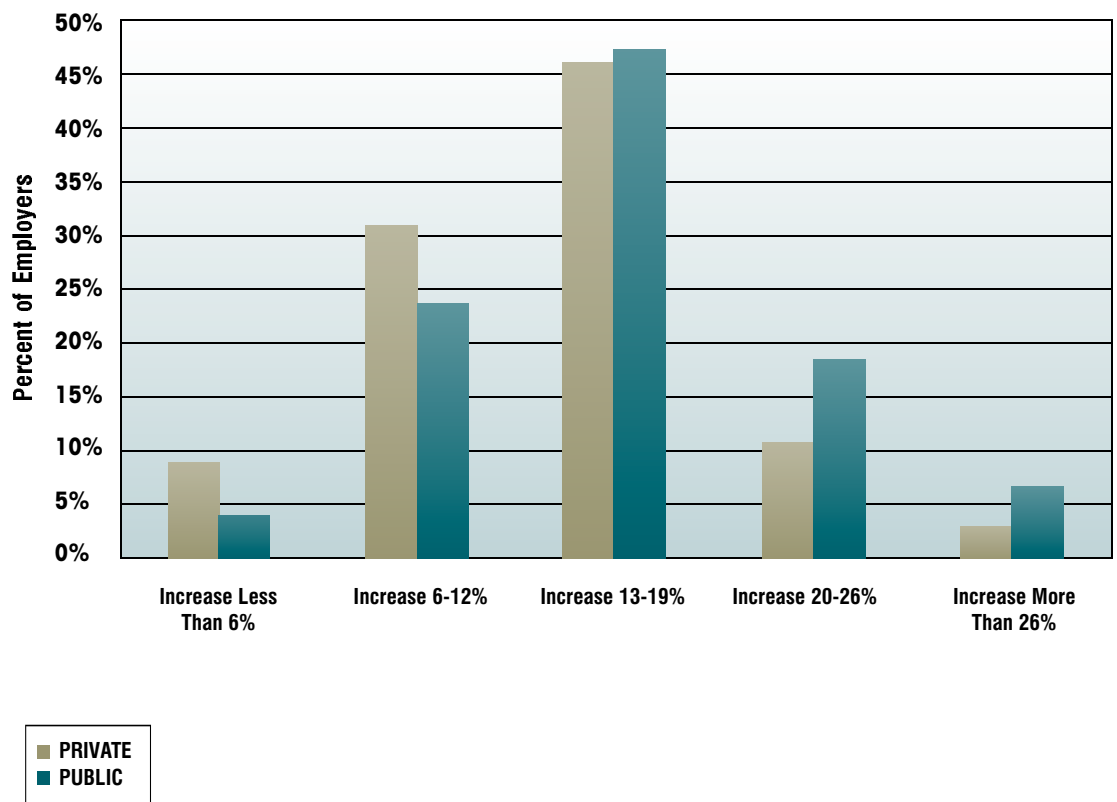
— Debbie Fleming  
Risk Manager, San Juan  
Unified School District



### Health and Drug Costs

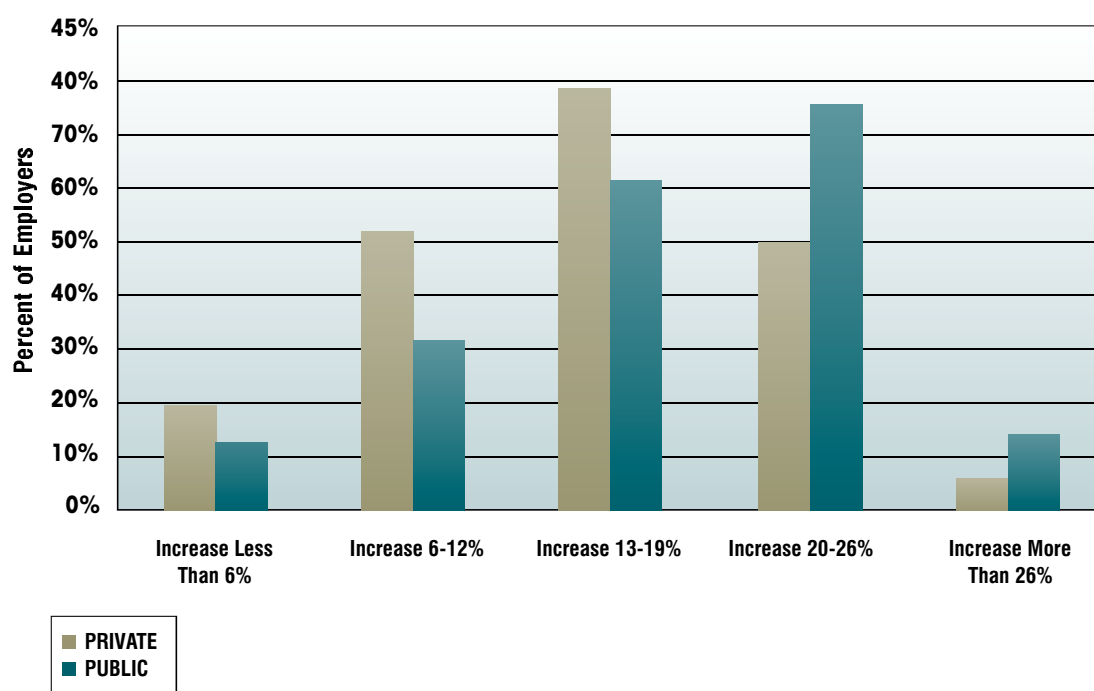
Our data document the magnitude of health and drug cost increases faced by employers in California. In 2002, 46 percent of private employers and 47 percent of public employers faced 13-19 percent increases in health costs. Providing health benefits is a more costly task for public sector employers. We found that the average annual cost for health care is 20 percent higher for public employers than for private employers. Public employers experience higher annual increases in health costs than do private employers. Twenty-five percent of public employers faced increases of over 20 percent compared to 13 percent of private employers.

### Increases in Health Costs, 2002



Rising drug costs continue to be a key driver of overall health care costs for employers in California and across the country. In 2002, drug costs increased at a higher rate than overall health care costs. Thirty-nine percent of private employers and 31 percent of public employers in California faced 13-19 percent increases in drug costs. Public employers also faced higher annual increases in drug costs than did private employers. Forty-five percent of public employers faced increases of over 20 percent compared to 28 percent of private employers.

## Increases in Health Costs, 2002



Increased spending on hospital care has recently accounted for the largest portion of overall health care costs in California and nationally.<sup>5</sup> Nationwide, consolidation among hospitals and a shortage of nurses has contributed to increases in hospital costs. Hospitals also attributed their higher charges to private payers as being the result of inadequate Medicare and Medicaid reimbursement rates. In California, several additional characteristics may exacerbate rising hospital costs. California hospitals must meet the requirements of AB 394 for minimum nurse-to-patient ratios, which is expected to improve patient outcomes, but cost at least \$500 million a year.<sup>6</sup> Structural changes required to meet the seismic requirements of SB 1953 are estimated to cost at least \$24-41 billion. Many California hospitals will need to be retrofitted, closed, or entirely reconstructed.

## Active Employees and Retirees

We examined total health care costs per employee, including employer and employee contributions. (These costs were not adjusted on an actual basis to reflect risk or utilization differences). Public employers had higher average health costs per employee compared to private employers and hospitals. The average cost for each active employee was approximately \$82 higher for public employers than for private employers. Among other reasons, this difference may be due to an older workforce, with higher rates of illness.<sup>7</sup>

We asked about total health costs for all retirees (including those below and above 65 years), enrolled in employer sponsored plans. The average costs for private and public sector retirees were higher than costs for hospital retirees. Costs were approximately \$57 and \$101 higher for private and public sector retirees, compared to hospital retirees.

AVERAGE MONTHLY COST	PRIVATE	PUBLIC	HOSPITAL
<b>Active employees</b>	\$ 404	\$ 486	\$ 420
<b>Retirees</b>	\$ 406	\$ 450	\$ 349

*“The biggest challenge is rates. Right now, the state budget is decreasing at the same time these rates are increasing dramatically.”*

— Ms. Jeffrey Markov  
Manager of  
Compensation and  
Benefits, Elk Grove  
Unified School District

## Effective Strategies to Contain Costs

To determine the most effective methods for containing costs, we examined the purchasing strategies of large employers with below average cost increases in 2002, and between 1999 and 2002. We found that 31 percent of private employers and 33 percent of public employers had increases in health costs of 12 percent or less in 2002 and between 1999 and 2002. Nine percent of private employers and 4 percent of public employers experienced increases of only 6 percent or less.

Our statistical analysis revealed that many factors, both within and outside the control of most employers, were associated with overall health care costs. We found that lower costs were associated with higher HMO penetration, the selection of regional rather than national carriers, and lower employer contributions to individual coverage. These findings are consistent with those from our earlier study of *Fortune* 500 firms.<sup>8</sup>



Employers with greater percentages of employees enrolled in HMO plans had lower health costs, implying that the gains from managed care may not yet be exhausted. During the 1990s, the gains from managed care were largely based on discounted fees that carriers obtained from hospitals and physicians. It is important that managed care continues to produce savings even though it is no longer based primarily on such discounts, but perhaps reflective of improvements in the service delivery system.

Employers also had lower costs if they purchased from regional, rather than national carriers. By purchasing from carriers on a regional basis, a company can select the lowest cost carriers in each market. It may be more difficult for national carriers to remain competitive with the combined performance of these “best” regional carriers.<sup>9</sup>

Lower employer contribution levels were associated with lower costs by giving employees a stronger incentive to select less costly carriers. Other factors such as age of workforce, and the extent of unionization, were associated with costs but are largely outside of the managerial control of large employers.

Several factors influenced both the rates of cost increase and overall health care costs. We found that HMO penetration was associated with significantly *higher* rates of increase, but with significantly *lower* overall costs. However, employers with greater than 85 percent of their employees enrolled in HMOs had *both lower* trends and overall costs. This implies that expanding HMO enrollment would likely reduce overall costs, but would not affect cost trends, unless nearly all employees were enrolled in HMOs.

Employers’ dropping of carriers was most strongly associated with lower cost trends. Employers that dropped more carriers, either to increase purchasing leverage or eliminate poor performers, had significantly lower rates of increase. This effect on cost trends was even stronger in the public than in the private sector.

The variation across employers in their cost performance suggests that there is still ample opportunity for savings based upon existing practices and insurance products. Higher HMO penetration, the reliance on regional carriers, and the dropping of carriers remain viable strategies for cost control in California. New insurance products in the marketplace are being offered at rates that are 6-12 percent less than existing products. Our statistical analyses demonstrate that the magnitude of the savings from HMO and regional carrier strategies likely equal or exceed those of new insurance products such as consumer driven health plans and tiered hospital plans.

## IV. Approaches to Purchasing Health Care

---

During the 1990s, large employers successfully leveraged their size to negotiate lower rates from carriers. While they still negotiate aggressively with carriers to lower rates today, they are less able to achieve comparable results. Health benefit managers attribute their declining purchasing leverage to consolidation among health carriers and large hospital systems. Many health benefit managers in our survey reported that even the largest employer groups in California, such as CalPERS, have lost some negotiating clout with health carriers. CalPERS, and other large employer groups in California, have recently shifted the focus of their purchasing strategies from using their size to negotiate the most favorable carrier rates, to using it to obtain greater cost transparency, efficiency, and quality in the health care delivery system.

Private and public employers in California are less likely to have self-funded plans than large employers across the country. Though they negotiate separate contracts with carve-outs for mental health, substance abuse and pharmaceuticals, they are again less likely to do so than employers in other states.<sup>10</sup>

### Competitive Bidding

Many survey questions focused on competitive bidding, a standard practice used by employers to purchase health benefits and other products. The use of RFPs as a method to administer competitive bidding among vendors was the central measure to collect information about this practice. Bidding involves an explicit comparison of different suppliers on products and prices, and sends a signal to current vendors that their relationship is not guaranteed over the long term.

Our data demonstrate that RFP bidding is widely used by private and public employers. Approximately, two-thirds of all employers used RFP bidding to purchase health benefits between 1999-2002. Fifty percent of private employers, 58 percent of public employers, and 65 percent of hospitals used RFP bidding to rebid all health plan business at the same time. Twenty-three percent of private employers and 9 percent of public employers used this method to reduce the number of health carriers.

USE OF RFP BIDDING	PRIVATE	PUBLIC	HOSPITAL
To rebid any health plans	66%	65%	71%
To rebid all health plans	50%	58%	65%
To reduce # of health plans	23%	9%	0%

Qualitative data from our survey suggest that many employers perceive that the gains from aggressive bidding and negotiating may be diminished, even among employers as large as CalPERS. While public and private employers often used CalPERS as a benchmark for carrier rates in the past, many public employers in our sample reported that they no longer do so today. CalPERS has lost some of its purchasing leverage due to consolidation among health carriers. This decrease in purchasing leverage, along with regional variations in price, has prompted many public agencies especially in the more competitive Southern California market, to withdraw from CalPERS and negotiate more favorable rates on their own.<sup>11</sup>

### Emerging Strategies to Influence Health Carriers: Risk Adjustment

*With rapidly rising costs, many employers are concerned that carriers compete on their ability to avoid high-risk individuals, rather than on the basis of quality and efficiency. Risk adjustment addresses this issue by determining payments to health carriers based on the health risk of enrollees. Under this strategy, health plans that enroll a high-cost population will receive higher payments. Those with a lower risk population will receive relatively lower payments. Without risk adjustment, health carriers have an incentive to attract a healthier population, and to avoid the sickest.*

*Verizon Communications has collected commitments from all incumbent HMO and indemnity plans to participate in risk adjusting premiums for California employees in 2004. Risk was assessed based on predictive modeling of DxCG from pharmacy claims. Hewitt Associates, a health benefits consulting firm, will aggregate and analyze the data to determine the risk factors for each health plan. This strategy will apply only to 50,000 Verizon Communications employees in California.*



## Self-Insurance

Through self-insurance, employers contract with a third party to process administrative claims. The employer, not the traditional insurer, is at risk for actual medical expenses since employers pay actual medical claims instead of insurance premiums. Self-insurance also allows employers to avoid some administrative costs, premium taxes, and to keep a revenue “float”. In addition, self-insured plans often have better employee specific data, which makes it easier for employers to identify high-risk illnesses among their employee population.

There is less reliance on self-insured plans among large California employers than among employers across the country, possibly due to a higher reliance on HMOs. Fifty-nine percent of private employers used a combination of self-insured and fully insured health plans to cover their employees. Thirty-two percent of public employers and 44 percent of hospitals used that combination. Public employers were more likely to purchase fully insured health plans since they may be unwilling to assume the financial risk that self-funding entails. Hospitals were more likely than private and public employers to have only self-insured plans, since many had developed health plans that included their own physicians and clinical networks.

USE OF SELF-INSURED PLANS	PRIVATE	PUBLIC	HOSPITAL
Only fully insured plans	29%	56%	24%
Self-funded & fully insured	59%	31%	44%
Only self-funded	13%	12%	32%

## Carve-Outs

Many employers negotiate separate contracts with carve-outs for specific aspects of their health benefits programs. Thirty-eight percent of private employers and 35 percent of public employers used carve-outs for drugs. These figures are approximately 30 percent lower than the national average for drug carve-outs because of regional carriers such as Kaiser that have their own pharmacy plan.<sup>12</sup> Large employers in California also used carve-outs for mental health and substance abuse benefits. Thirty-seven percent of private employers and 48 percent of public employers reported separately administered health care programs for mental health and substance abuse.

*“Large employers are redefining the value proposition of health carriers by emphasizing disease management, quality measurement and promotion, and treatment options, instead of only price and leverage.”*

— Peter Lee, President,  
Pacific Business Group  
on Health

## V. Carrier Choice and Product Options

---

Most private and public employers contract with a small number of health carriers. Approximately half of all employers in our sample offered fewer than three carriers to their employees. This approach is somewhat surprising given that California is the birthplace of managed competition – a strategy that provides employees with a wide choice of carriers, and a financial incentive to choose the lowest cost option.<sup>13</sup> We found that the average large employer is more likely to restrict carrier choice, and to have dropped rather than added carriers. Nearly one-fourth of all employers have a total replacement strategy that offers only one carrier to employees.

Given the decline in carriers choice, there has been increasing discussion around the proliferation of multiple benefit offerings within carriers. Nevertheless, we found that less than one-fifth of employers offered more product options than they did three years ago.

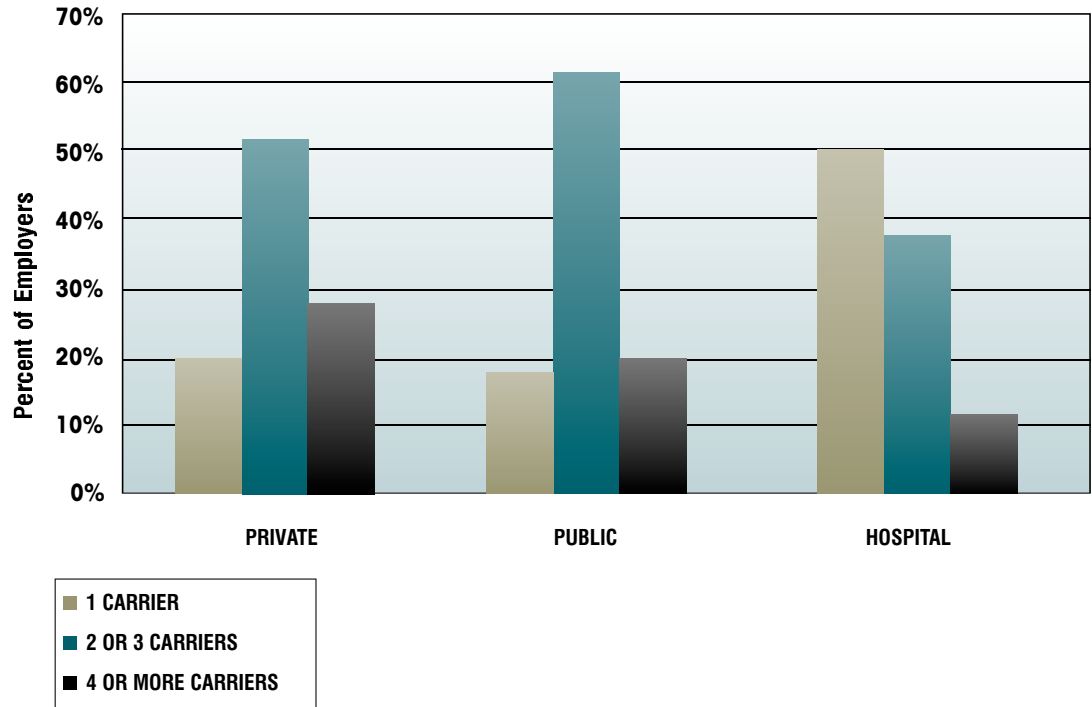
### **Carrier Choice**

Most public and private employers offer their employees a small number of carriers. Twenty percent of private employers, 18 percent of public employers, and 48 percent of hospitals offered only one carrier to employees. Fifty-two percent of private employers, 62 percent of public employers, and 40 percent of hospitals offered a choice of 2 to 3 carriers to employees. Twenty-eight percent of private employers, 20 percent of public employers, and 12 percent of hospitals offered a choice of 4 or more carriers to employees.

*“The single-source policy fails to take advantage of the existence of effective managed care.”*

— Alain Enthoven, Stanford University in “Employment-Based Health Insurance is Failing: Now What?” *Health Affairs* Web Exclusive, May 28, 2003

### Choice of Carriers Offered to Employees



We found size to be associated with carrier choice. Private employers with 500-1,499 employees were more likely to restrict choice to 1 carrier. Of those employers who offered a choice of 4 or more carriers, approximately two-thirds have 3,000 or more employees. A similar size effect was found for public employers. Public employers with 500-1,499 employees were more likely to restrict choice to just 1 carrier for their employees. Fifty-nine percent of public employers who offered a choice of 4 or more carriers had 3,000 or more employees.

### Product Options

Given the decline in carrier choice, there has been increasing discussion around the expansion of product options within a carrier (e.g., high, moderate, low deductible PPO plans).<sup>14</sup> However, we found that employers, on average, offered less than two product options per carrier. Less than one-fifth of employers offered more product options than three years ago.

PRODUCT OPTIONS	PRIVATE	PUBLIC	HOSPITAL
Total number offered per carrier	1.6	1.6	1.7
Offered more options than 3 years ago	18%	19%	16%

## VI. Employer Contribution Levels and Strategies

---

Large employers have increased cost sharing with employees through lower employer premium contributions to individual and family coverage. Unions have limited the extent of cost sharing, especially in the public sector where unionization rates are high.

The majority of large employers in California have not implemented a fixed dollar strategy as a method to increase cost sharing with employees. A fixed dollar strategy ties employer contribution levels to the lowest cost plan. Employees that purchase a health plan with more comprehensive coverage must pay the full cost of the added insurance. We found that large employers were more likely to set contribution levels using either a range of percents, or a fixed percent approach.

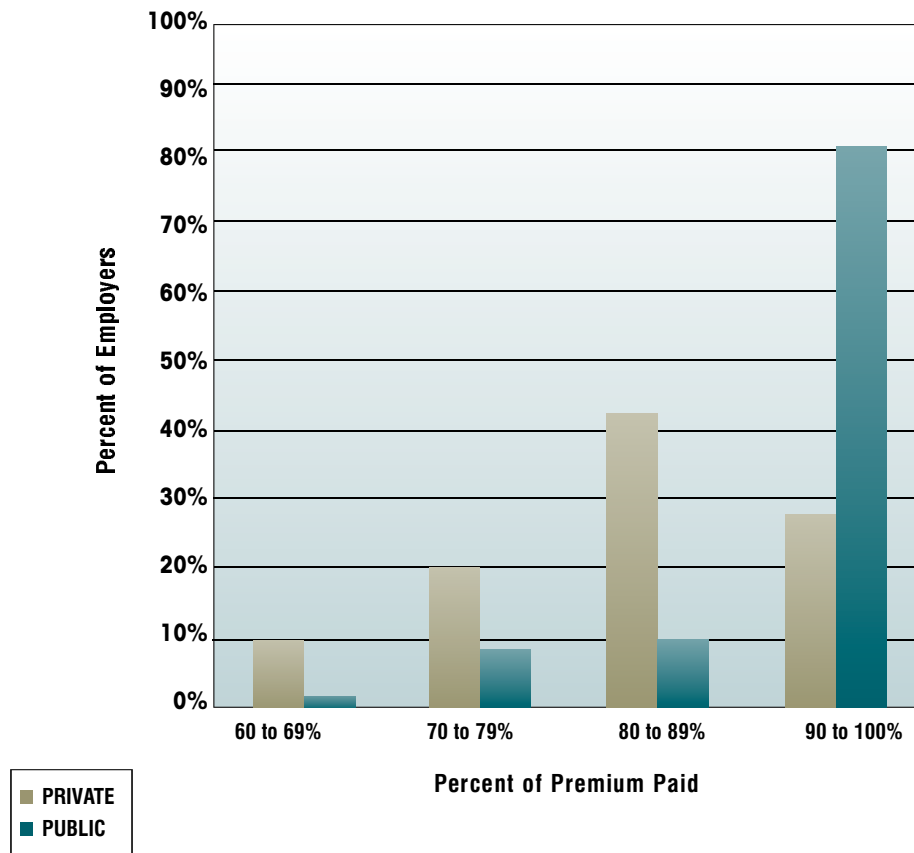
### Employer Contribution Levels

We asked about the average percent contribution to individual and family coverage. Large California employers have shifted costs to employees through lower employer contributions. Between 1999 and 2002, private and public employers each reduced their contribution to individual coverage by 2 percent. Together with rising premium costs, the reduction in employer contribution levels leads to larger out-of-pocket costs for employees.

Large employers contributed an even smaller amount to family coverage. Private employers contributed, on average, 75 percent to family coverage, compared to 81 percent for individual coverage. Moreover, we found that thirty-four percent of private employers contributed less than 75 percent to family coverage. Public employers contributed 85 percent to family coverage, compared to 94 percent for individual coverage.

Public employers were significantly more generous in their contribution to individual coverage than private employers. Eighty-one percent of public employers contributed between 90-100 percent to individual coverage, compared to 28 percent of private employers. Thirty percent of private employers set contribution levels at 79 percent or below, compared to only 9 percent of public employers.

## Distribution of Contribution Levels for Individual Coverage



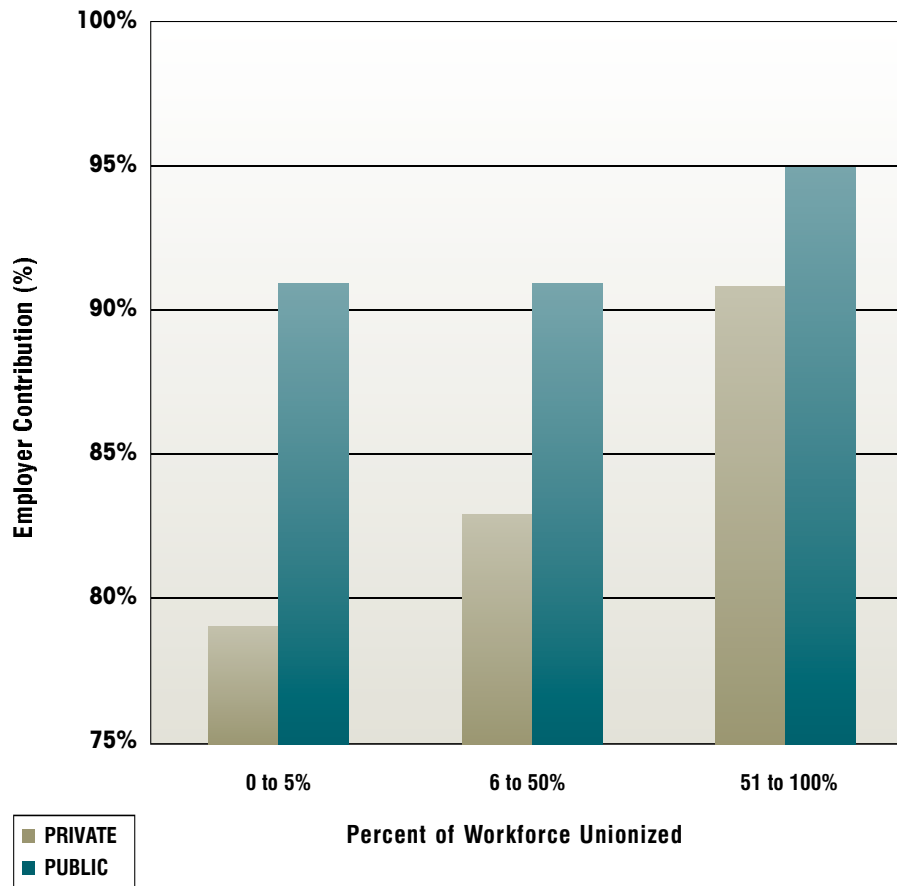
### Effects of Unionization on Contribution Levels

Unionization can limit the ability of employers to implement cost sharing strategies with employees. Highly unionized employers were more likely to set generous contribution levels to individual coverage. This was more apparent in the private sector, where the average unionization rate was just 11 percent. For private employers with 51-100 percent unionization, the average percent premium contribution was 91 percent. Private employers with 0-5 percent unionization contributed only 79 percent to individual coverage.

Public employers set contributions to individual coverage in the 90-100 percent range at all levels of unionization. Many public sector employees have come to expect long-term job security and rich benefits during their career and retirement, in lieu of the higher compensation that traditionally characterizes the private sector.<sup>15</sup>



## Effect of Unionization on Contribution Levels

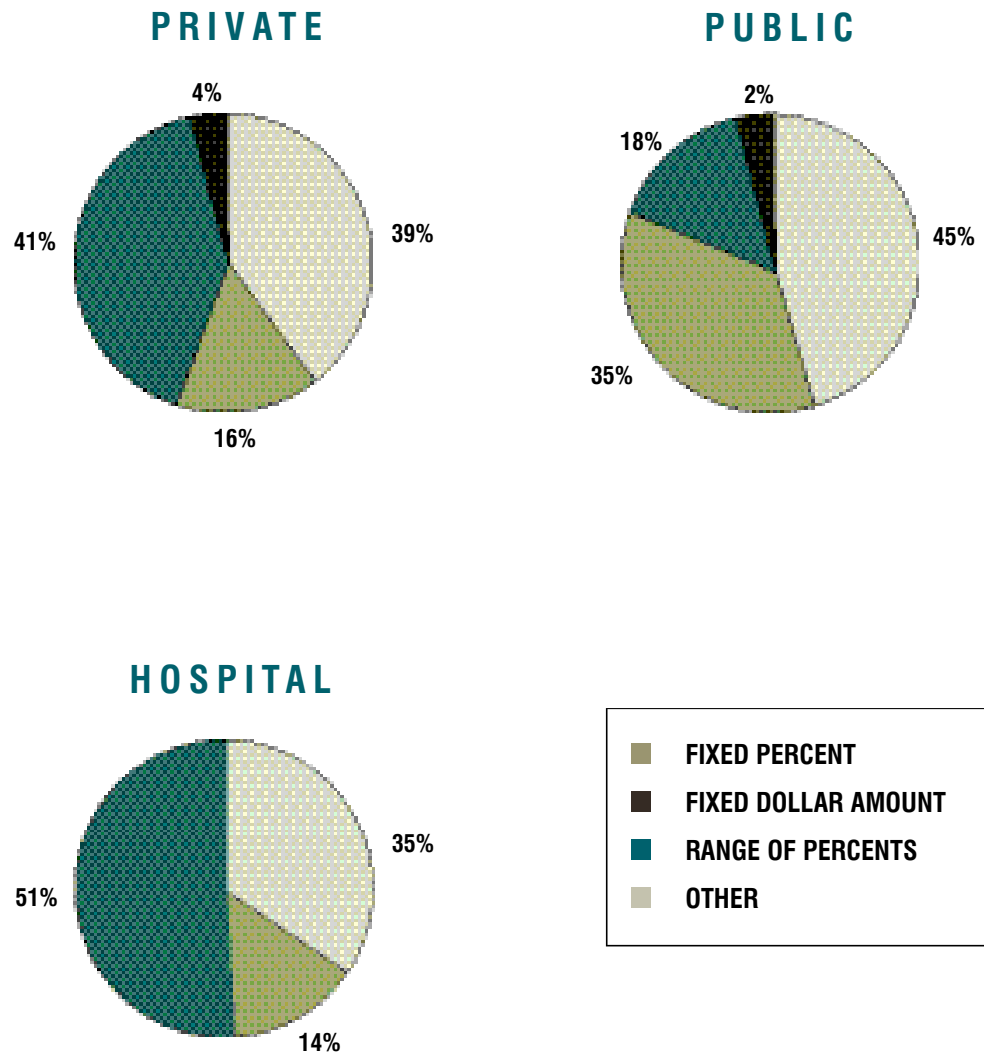


### Employer Contribution Strategy

We asked employers to characterize what basic strategy best described the way they set premium contributions. The first option was a fixed percent strategy, in which employee premium contributions were set at the same percentage (for example, 80 percent of the total premium cost of any plan). A second option was a fixed dollar strategy, which ties employer contribution levels to the lowest cost plan. This strategy is used to encourage employees to make more cost conscious decisions. Employees that purchase a health plan with more comprehensive coverage must pay the full cost of the added insurance. The third option was a range of percentages for different types of plans, with a final option involving a combination of the first three strategies.

Private employers and hospitals were more likely to use a range of percents approach to set contribution levels. Public employers most often used a fixed percent strategy. Only 16 percent of private employers and 14 percent of hospitals used a fixed dollar strategy that would increase employee contributions for more expensive plans. Approximately one-third of public employers used a fixed dollar strategy.

### Contribution Strategy



## VIII. Drug Costs

Rising drug costs have prompted employers to implement a number of cost containment strategies. One strategy is the use of tiered drug plans that provide employees with a financial incentive to choose less expensive drugs. Other strategies include providing employees with a financial incentive to purchase mail order drugs, and purchasing drugs through an employer coalition.

### Tiered Drug Plans

Tiered drug plans have been widely implemented among large employers across the country. Considerable research has shown that incentive-based drug formularies have achieved cost savings, primarily by shifting consumer behavior toward less expensive drugs. Several studies have shown that raising out-of-pocket costs have resulted in increased use of generic drugs, and lower overall drug utilization and spending.<sup>16</sup>

Seventy-one percent of private employers, 46 percent of public employers, and 74 percent of hospitals have implemented a three-tiered plan in which different copayments are assigned to generic, preferred, and non-preferred medications. On average, 78 percent of private employees, 69 percent of public employees, and 74 percent of hospital employees are enrolled in three-tiered plans. Of those employers not yet offering three-tiered drug plans, 49 percent of private employers, 34 percent of public employers, and 43 percent of hospitals plan to do so within the next two years.

USE OF THREE-TIERED DRUG PLANS	PRIVATE	PUBLIC	HOSPITAL
<b>Offer three-tiered drug plan</b>	71%	46%	74%
<b>Percent of employees enrolled in three-tiered plan if offered</b>	78%	69%	74%
<b>Plan to offer three-tiered plan within next 2 years</b>	49%	34%	43%

The effect of tiered drug plans may depend upon the size of the co-payment and the price differential between tiers. One study found that higher pharmacy co-payments were associated with lower spending on drugs. A 50 percent increase in copayment (from \$5 to \$7.50) resulted in a 12.3 percent reduction in drug spending for IPA plans.<sup>17</sup>

The price differential between tiers is also used to encourage employee price sensitivity between generic and more expensive drugs. We used the median copayment to determine the magnitude of difference between each tier. Private and public employers had similar price differentials between tiers, with a difference of approximately \$10 between generic and preferred drugs, and \$20 between generic and non-preferred drugs. Private employers imposed more cost sharing on employees, however, by pricing the copayment for the lowest cost tier (generic drugs) \$5 higher than public employers.

Though large employers most often used tiered copayments for drugs, some large employers have moved to tiered coinsurance. Under this strategy, a beneficiary's payments are automatically adjusted with increasing drug prices. Five percent of private employers, 2 percent of public employers, and 12 percent of hospitals offered only percent-based copayments. Six percent of private employers, 5 percent of public employers, and 16 percent of hospitals offered a combination of percent and dollar-based copayments for drugs.

Employers use a number of other strategies to control drug costs including the provision of financial incentives to encourage employees to purchase drugs by mail, and purchasing drugs through employer coalitions. Eighty-eight percent of private employers and 79 percent of public employers provided a financial incentive to employees to purchase by mail. Four percent of private employers, 10 percent of public employers, and 13 percent of hospitals purchased drugs through a coalition.

RANGE & MEDIAN CO-PAYMENT		MEDIAN	MINIMUM	MAXIMUM
PRIVATE	Generic drugs	\$10.00	\$3.00	\$30.00
	Preferred drugs	\$19.00	\$6.50	\$60.00
	Non-Preferred drugs	\$30.00	\$7.50	\$60.00
PUBLIC	Generic drugs	\$5.00	\$3.00	\$12.50
	Preferred drugs	\$14.25	\$5.50	\$25.00
	Non-Preferred drugs	\$25.00	\$10.50	\$50.00
HOSPITAL	Generic drugs	\$10.00	\$5.00	\$15.00
	Preferred drugs	\$20.00	\$10.00	\$30.00
	Non-Preferred drugs	\$35.00	\$20.00	\$47.50

## VIII. Quality Measurement and Management

Although quality measurement and management activities are well institutionalized among large employers, they remain a secondary concern to cost containment. Large employers routinely collected quality information, and used it to set performance standards for quality – although their emphasis was largely on improving customer service by health carriers, rather than clinical quality. In the last two years, new quality measurement initiatives among large employers have focused on the measurement of provider, rather than health carrier, performance. Employers have emphasized the measurement and collection of provider performance data in order to make providers more accountable for their clinical and cost outcomes.

### Collecting and Disseminating Quality Data

Private employers and hospitals were more likely to collect quality information than were public employers. Thirty-nine percent of private employers, 24 percent of public employers, and 21 percent of hospitals collected National Committee on Quality Assurance (NCQA) accreditation. Approximately one-quarter of all employers collected Health Plan Employer Data and Information Set (HEDIS) data. Hospitals were twice as likely to collect information from customer satisfaction surveys than were private and public employers. Private employers were more likely to rely on consultants as a source for quality information than public employers or hospitals. Nearly one-fourth of private employers also relied on coalitions such as the Pacific Business Group on Health for quality information. Only 22 percent of private employers, 26 percent of public employers, and 17 percent of hospitals disseminated quality information to employees. A few large employers such as the University of California and Wells Fargo have embedded quality information into plan comparison tools in order to encourage employees to make both cost and quality conscious decisions.

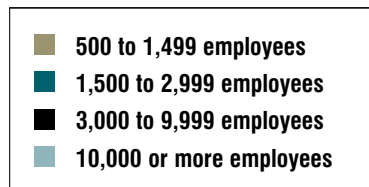
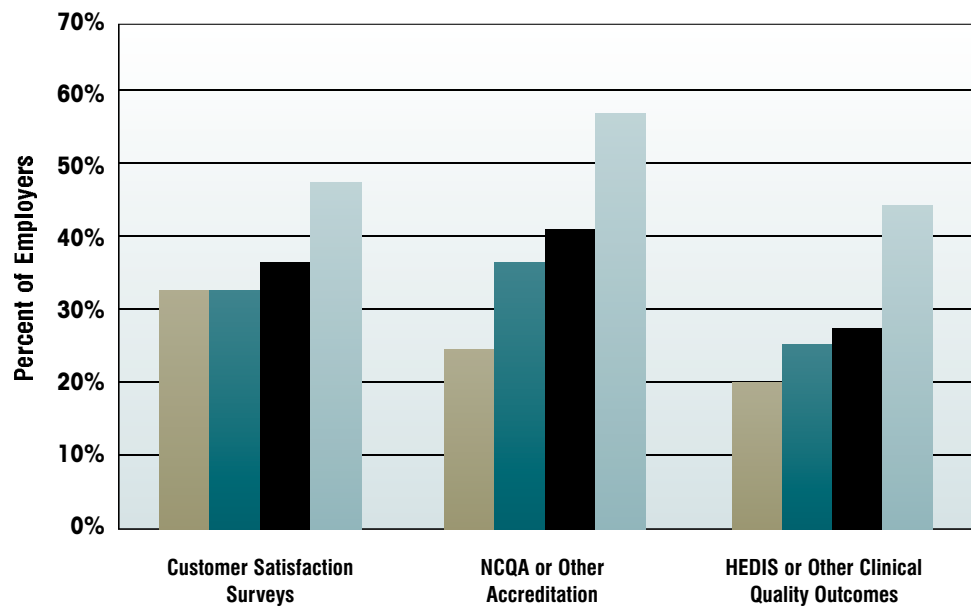
COLLECTION & SOURCES OF QUALITY INFORMATION	PRIVATE	PUBLIC	HOSPITAL
Accreditation by NCQA or other organization	39%	24%	21%
Customer satisfaction survey	37%	33%	68%
HEDIS	29%	26%	28%
Consultants	71%	50%	42%
Coalition	20%	18%	0%



We found size to be associated with the collection of quality data. Private employers with 10,000 or more employees were twice as likely to collect NCQA accreditation and HEDIS data than were employers with 500-1,499 employees. Approximately one-third of employers with less than 1,500 employees collected quality information.

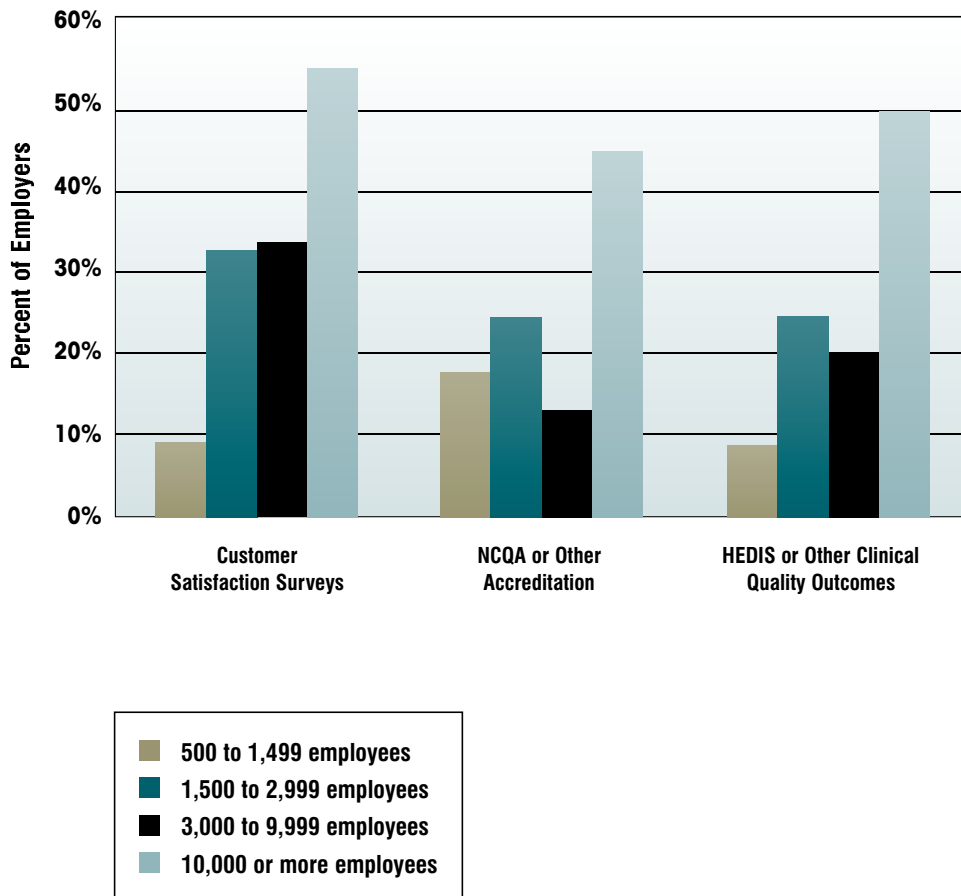
## Collection of Quality Data by Size

### PRIVATE EMPLOYERS



The effect of size on the collection of quality data was even more pronounced for public employers. The collection of customer satisfaction surveys, NCQA status, and HEDIS data was three to five times more likely for public employers with 10,000 or more employees. Less than one-fourth of employers with 500-1,499 employees collected customer satisfaction surveys, NCQA accreditation, and HEDIS data.

## Collection of Quality Data by Size PUBLIC EMPLOYERS



*“Pay for Performance is already changing the way physician groups look at IT investment, chronic care management, and ways to improve the patient experience. If the health plans can sustain and enhance the financial rewards over time, we may well realize the goal of breakthrough levels of improvement.”*

— Tom Davies, Pay For Performance Steering Committee

## **Integrated Healthcare Association: Pay for Performance Initiative**

### **A Business Case for Rewarding Physician Group Excellence**

*Pay for Performance is grounded in two core requirements: employ a common set of metrics to measure physician group performance; and commit significant funding to reward this performance. Six plans have agreed to support these two principles: Aetna, Blue Cross of California, Blue Shield of California, CIGNA HealthCare of California, Health Net, and PacifiCare (a seventh plan, Western Health Advantage, will participate in Year 2 of the initiative).*

*The business case for Pay for Performance is driven by three basic points: Current provider reimbursement systems do not reward quality or performance; report cards on performance – promulgated by regulators, accrediting bodies, and consumer advocacy groups typically focus on health plans, not providers; and if all individual health plans issued their own report cards on their physician groups, they would confuse the public with “dueling scorecards” and non-comparable data.*

*All stakeholders in California’s health care system will potentially derive benefits from supporting and participating in the Pay for Performance initiative. Benefits for purchasers include real measures for provider differentiation, quality improvements, reduction in lost work days, and healthier employees.*

### **Use of Quality Information in Contracting**

Private employers were more likely than public employers or hospitals to use quality information to set performance standards in their contracts with carriers. Fifty-five percent of private employers, 46 percent of public employers, and 36 percent of hospitals required NCQA accreditation of their health carriers. Private employers were also more likely to require customer service standards than public employers or hospitals. Approximately one-quarter of private and public employers, and 17 percent of hospitals, required annual improvements in clinical quality.

USE OF QUALITY INFORMATION IN CONTRACTING	PRIVATE	PUBLIC	HOSPITAL
Require NCQA accreditation	55%	46%	36%
Set requirements for network composition	28%	24%	48%
Set requirements for annual improvements in clinical quality	24%	24%	17%
Set requirements for customer service standards	78%	55%	48%

### New Directions in Quality Management

The majority of large employers measure health carrier performance through NCQA, customer service, and HEDIS standards. Large employers have more recently demanded accountability and transparency from providers for the quality of care they pay for. One of the most prominent initiatives in California to measure physician group performance is the Integrated Healthcare Association's Pay for Performance Initiative. Large employers are also involved in national initiatives such as the Leapfrog Group that measure and reward provider performance. The Pacific Business Group on Health has hosted the Leapfrog Group in California since its inception, and is responsible for requiring more than 200 hospitals in California to collect and publish Leapfrog measures.

## IX. Wellness and Disease Management

---

Sixty to 75 percent of total health expenditures nationally are associated with chronic illnesses.<sup>18</sup> Large employers are devoting greater attention and scrutiny to wellness and disease management programs that encourage healthy behavior, and target high-risk and chronically ill populations. Large employer groups such as CalPERS and PBGH have recently established performance criteria for their carriers and external vendors to meet. These employers believe that wellness and disease management programs have the potential to decrease worker time lost to illness and disability, and increase worker productivity.<sup>19</sup>

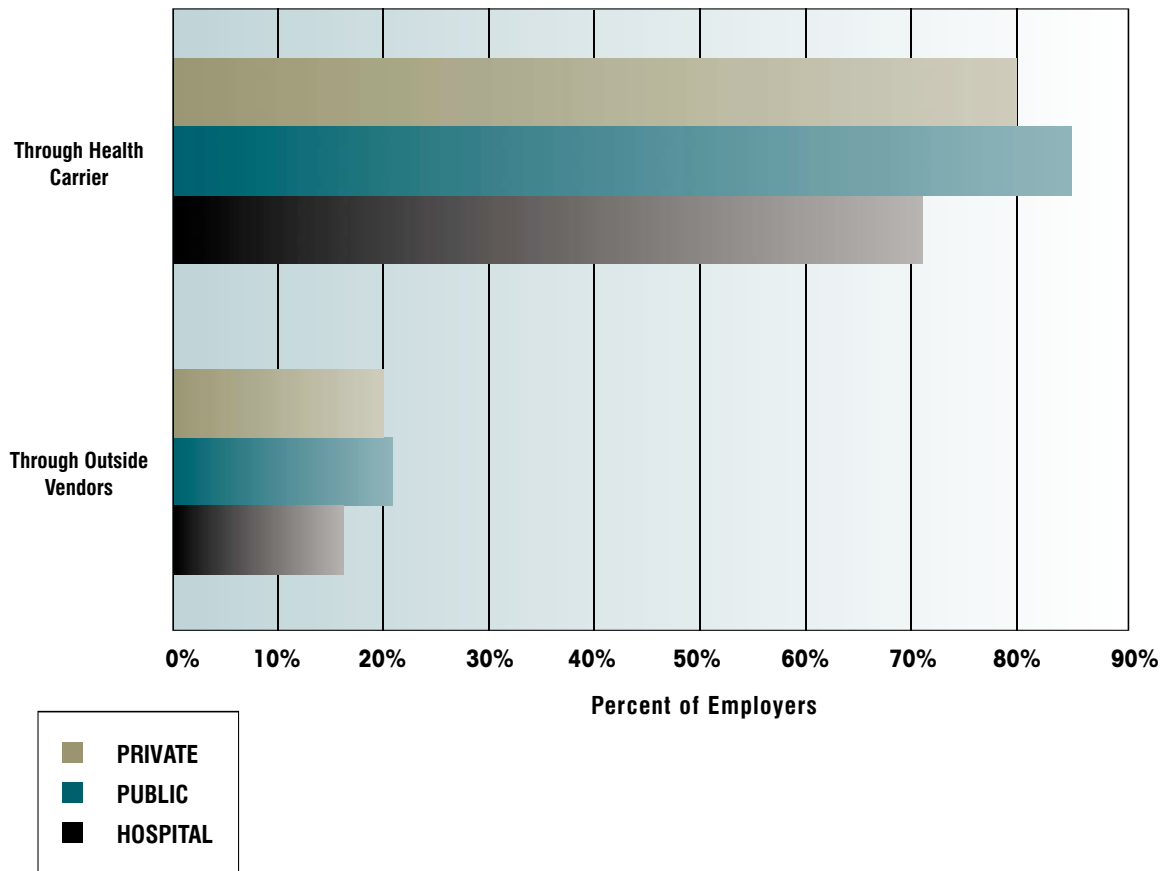
### **Wellness and Disease Management Programs**

Eighty percent of private employers and 85 percent of public employers offered wellness and disease management programs through their health carrier. Approximately 20 percent of all employers provided wellness and disease management services through external vendors.

To encourage employees to participate in wellness and disease management programs, 17 percent of private and public employers offer their employees a financial incentive to participate. Employers use financial incentives to increase participation in these programs since they are voluntary and require significant initiative on the part of employees. Typical financial incentives include employee discounts at health clubs, and bonuses for employees who quit smoking.



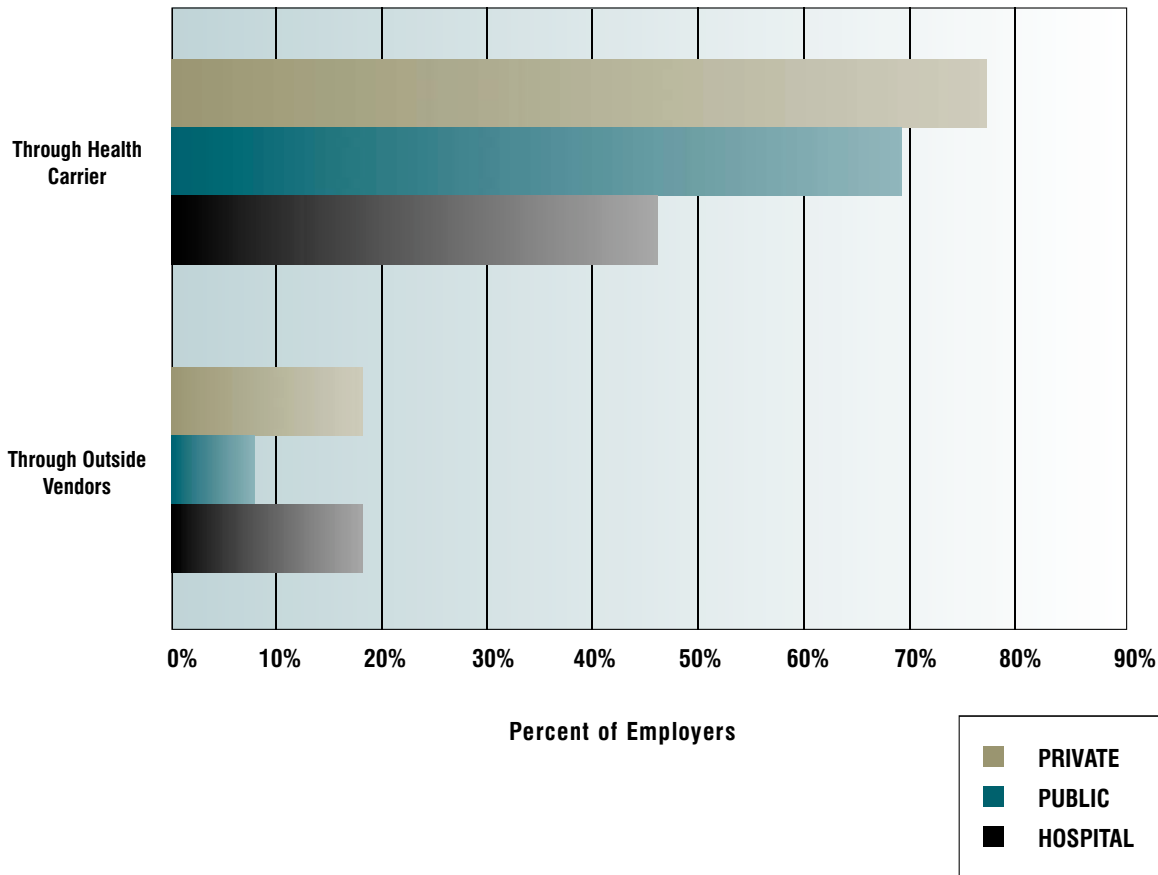
## Wellness & Disease Management Programs



### Care Management Programs for High-Risk Employees

Care management programs for high-risk employees are more assertive and comprehensive interventions that target specific diseases within a population. They often utilize care managers to develop an individualized plan of services, arrange and monitor service delivery, and evaluate the effectiveness of care. Seventy-seven percent of private employers, 70 percent of public employers, and 46 percent of hospitals offer care management programs through their health carrier. Fourteen percent of private employers and 7 percent of public employers contract with external vendors for care management programs.

## Care Management Programs



### New Directions in Wellness and Disease Management

Though most health carriers offer wellness and disease management programs, large employers have recently become concerned with the performance and accountability of their programs. Large employers are devoting greater attention and scrutiny to programs offered by health carriers. Concerns over the wide variation among programs have led to an initiative by the Pacific Business Group on Health that measures and evaluates the effectiveness of disease management programs provided by health carriers in California.

---

*“PBGH members and other large purchasers are increasingly expecting their health plans to demonstrate effective disease management for that small percentage of enrollees who both benefit most from improved care and cost the most. The evaluation project conducted by PBGH was an important part of our ongoing efforts to measure and promote higher value care delivery.”*

— Peter Lee, President,  
Pacific Business Group on  
Health (PBGH)

---

### **Pacific Business Group on Health: Disease Management Effectiveness Project**

*In 2002, the Pacific Business Group on Health (PBGH) evaluated the existing disease management programs of the largest health plans in California. PBGH found that while all health plans committed time and resources to disease management, there was minimal effort by plans to measure the efficacy and cost effectiveness of interventions. Disease management programs were either developed by the health plan itself, contracted out to an external vendor, or a combination of the two. Internally hosted programs proved advantageous to health plans because they could more easily be integrated with physician groups and health promotion initiatives. External vendors were more likely to use skilled case managers, patient tracking tools, and other forms of expertise. For most plans, the disease management programs were in some state of flux, being expanded, revised, or dropped by health plans in favor of new vendors.*

*Programs used a similar process of stratifying patients by risk, sending mailings to low-risk individuals, giving presentations and calling high-risk individuals, as well as providing feedback to their physicians. Despite performing these tasks, most of the health plans did not measure whether these efforts were directly leading to improved health outcomes. Feedback given to physicians was sometimes reported as being ignored entirely. Health plans that were more closely connected with their physicians were better able to recruit patients and to provide physician feedback that was acted upon.*

---

## X. Comparison of California & Non-California Employers

Ninety-two percent of private employers in our sample were national firms with employees across the country. National firms in our study purchase coverage for 1,139,805 employees in California, who account for 25 percent of their total workforce nation-wide. We collected health benefit data on their 3,449,282 employees in other states. To understand whether the purchasing strategies of large California employers are influenced by the proportion of employees within the state, we categorized private employers into three categories based on the percentage of their workforce in California: a) 1-33% b) 34-66% c) 67-100% of employees in California.

Similar to other studies, we found that large employers most often adopt a national purchasing strategy for their employees. However, employers with a greater percentage of their workforce in California were more likely to adapt their purchasing strategy to the California environment.

Those employers were more likely to have a greater percentage of their employees enrolled in HMOs. Employers with 67-100 percent of their workforce in California had 50 percent of employees enrolled in HMOs. Employers with 1-33 percent and 34-66 percent of their workforces in California had 45 percent and 47 percent of employees enrolled in HMOs respectively. The continued commitment to HMOs is also reflected in higher premium contribution levels, lower levels of co-payments, fewer self-funded plans, and fewer carve-outs that characterize HMO products.

PERCENT OF EMPLOYERS	PERCENT OF WORKFORCE IN CALIFORNIA		
	1-33%	34-66%	67-100%
Has self-funded plan	45%	47%	50%
In last 3 years, used RFP bidding to rebid any health plan	89%	69%	55%
Contribute > 85% to individual coverage	73%	62%	59%
Use carve-outs for MH/SA benefits	29%	25%	43%
Self performance standards for customer service	30%	14%	22%
Offer three-tier drug plan	76%	75%	57%

## XI. New Strategies

California has often been the testing ground for new insurance products and strategies, particularly those based upon the principles of managed care. With health care costs continuing to rise, a variety of new insurance products have emerged in California as employers, health carriers, and policymakers actively seek solutions to contain costs. These products include consumer driven health plans, tiered hospital networks, online disease management programs, and online enrollment for health benefits. Existing health insurance carriers in California, as well as new players like Definity and Lumenos, offer such products.

While some large employers have experimented with this new generation of health insurance products, their approach has been cautious. Only a small percentage of employers offer consumer driven health plans or tiered hospital networks (products that will be discussed in detail in future publications). Those that have implemented such plans offer them only as an alternative to existing coverage. Large employers have yet to mandate participation in these new insurance programs, or provide strong financial incentives that would encourage a rapid employee migration.

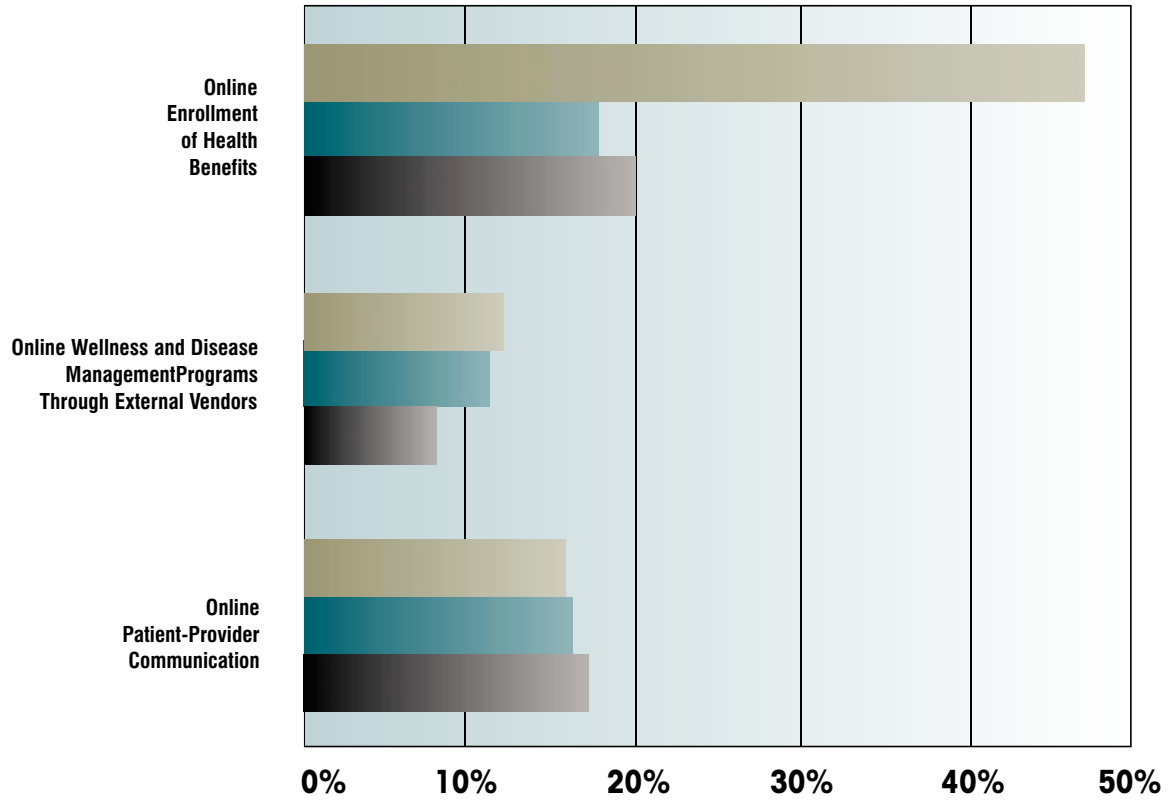
Employers are more likely to implement online strategies for health benefits. Online strategies have the potential to increase administrative efficiency with little risk involved in implementation. A larger number of employers have implemented online enrollment of health benefits. Forty-seven percent of private employers, 18 percent of public employers, and 20 percent of hospitals provide online health benefits enrollment. Large employers have also implemented online wellness and disease management programs. Approximately 12 percent of private and public employers purchase wellness and disease management services from external vendors. Online wellness and disease management programs are gaining momentum among large employers, and they are beginning to report cost savings from these strategies. Twenty-three percent of private employers and 13 percent of public employers reported savings from online wellness and disease management programs.

*“We’re looking at tiers, higher deductibles, and higher out-of-pocket maximums to incent employees to choose a less expensive plan.”*

— Anonymous Health Benefits Administrator from a California Hospital



## Online Benefit Strategies



## XII. Conclusion

---

Though cost increases are expected to continue well above the consumer price index, the response of large employers has been largely incremental. Large employers are continuing to introduce incremental changes in premium contributions, benefits design, and program administration. Our study demonstrates that incremental strategies can reduce overall health care costs and the rates of increase. Employers with above average costs can imitate those employers who consistently achieve strong cost performance by expanding enrollment in HMOs, purchasing from regional carriers, reducing premium contributions, and narrowing the choice of carriers they offer. Yet these changes in strategy may be difficult to implement by any particular employer because of the resistance of strong unions and other groups. The resistance to change may be strongest among large public employers.

New products such as consumer driven plans, tiered plans, and exclusive networks offer still other opportunities for cost reductions. Health carriers and new vendors are making them available at rates 6-12 percent below prices of existing HMO and PPO products in the California market. Nevertheless, to achieve significant levels of savings, employers need to shift the majority of their workforce to these new products. So far, large employers have been cautious in the introduction of these new products, only offering them as an alternative to their existing product options. Thus, savings from these new products in the short term will be quite limited. Given the magnitude of cost increases, it is unclear whether such incremental and cautious strategies will be sufficient to meet rising costs.

One of the most striking features of the California managed care marketplace has been the emergence of a new purchasing paradigm, spearheaded by large employers groups such as CalPERS and PBGH. Large employers in California are shifting the focus of their purchasing strategies from using their size to negotiate the most favorable carrier rates, to using it to obtain greater cost transparency, efficiency, and quality in the health care delivery system. CalPERS most recent strategic plan called for it to direct its attention more toward the underlying health delivery system. According to this strategy, vendors would be selected based on their low administrative costs, their ability to select and reward the most effective providers, and their networks' ability to provide a full array of disease and care management services. Similarly, the PBGH is working with its carriers to define specific performance criteria, and improve their competencies for managing consumer health.

---

Large California employers may not, however, have to depend entirely on their own actions to address the cost crisis. The health benefits strategy of large employers will continue to be influenced by government policy as well as market conditions. Recent legislation at the federal and state levels could bring rate relief to beleaguered California employers. Federal legislation for expanding drug coverage in the Medicare program could potentially reduce large employer liabilities among those currently offering retiree coverage. Similarly, in California, SB2 mandates employers with more than 20 workers to offer coverage to employees, or pay into a statewide fund. This could reduce the sizeable subsidies large employers pay for family coverage of spouses working in small firms. The health benefits strategy of all employers will continue to be influenced by changing government policy, as well as by market leaders.

## XIII. Footnotes

---

<sup>1</sup> J. Maxwell, F. Briscoe, C. Watts, S. Zaman, and P. Temin, “Corporate Health Care Purchasing Among the *Fortune* 500,” Report to the Robert Wood Johnson Foundation, May 2001; and J. Maxwell and S. Zaman, “Health Care at the Crossroads,” Report to the National Association of Manufacturers, September 2002.

<sup>2</sup> California Employment Development Department, “Labor Market Information,” <http://www.calmis.ca.gov/htmlfile/subject/DEMOAA.HTM> (November 13, 2003).

<sup>3</sup> K. McDonell and P. Fronstin, “EBRI Health Benefits Databook,” (Washington, D.C.: Employee Benefit Research Institute, 1999).

<sup>4</sup> L. Earnest and J. Hirsch, “Grocers, Unions Still Aren’t Talking,” *Los Angeles Times*, October 20, 2003.

<sup>5</sup> B. Strunk and P. Ginsburg, “Tracking Health Care Costs: Trends Stabilize but Remain High in 2002,” *Health Affairs* Web Exclusive, June 11, 2003.

<sup>6</sup> J. M. Coffman, J.A. Seago, and J. Spetz. “Minimum Nurse-to-Patient Ratios in Acute Care Hospitals in California,” *Health Affairs*, September/October 2002, Volume 21, Number 5, pp. 53-64; and California Healthcare Association, “California Hospitals’ Bottom Line Threatened,” The CHA Special Report, April 2003.

<sup>7</sup> Personal communication with public employers.

<sup>8</sup> J. Maxwell, F. Briscoe, C. Watts, S. Zaman, and P. Temin, “Corporate Health Care Purchasing Among the *Fortune* 500,” Report to the Robert Wood Johnson Foundation, May 2001.

<sup>9</sup> J. Maxwell and S. Zaman, “Health Care at the Crossroads,” Report to the National Association of Manufacturers, September 2002.

<sup>10</sup> J. Maxwell, F. Briscoe, C. Watts, S. Zaman, and P. Temin, “Corporate Health Care Purchasing Among the *Fortune* 500,” Report to the Robert Wood Johnson Foundation, May 2001.

- <sup>11</sup> Personal communication with public employers.
- <sup>12</sup> J. Maxwell, F. Briscoe, C. Watts, S. Zaman, and P. Temin, "Corporate Health Care Purchasing Among the *Fortune* 500," Report to the Robert Wood Johnson Foundation, May 2001; and J. Maxwell and S. Zaman, "Health Care at the Crossroads," Report to the National Association of Manufacturers, September 2002.
- <sup>13</sup> J. Maxwell and P. Temin, "Managed Competition versus Industrial Purchasing among the *Fortune* 500," *Journal of Health Policy, Politics and Law* (February 2002): 7-30; and A. Enthoven, "The *Fortune* 500 Model for Health Care: Is Now the Time to Change?" *Journal of Health Policy, Politics and Law* (February 2002): 36-48.
- <sup>14</sup> J. Robinson, "Renewed Emphasis on Consumer Cost Sharing in Benefit Design," *Health Affairs*, Web Exclusive, March 20, 2003.
- <sup>15</sup> J. Maxwell, P. Temin, and T. Petigara, "Private Purchasing Practices in the Public Sector: A Comparison of State Employer Groups and the *Fortune* 500," *Health Affairs*, March/ April 2004: 182-190.
- <sup>16</sup> G. Joyce, J. Escarce, M. Solomon, and D. Goldman, "Employer Drug Benefit Plans and Spending on Prescription Drugs," *Journal of the American Medical Association* 288: 1733-1739, 2002; and L. Bymark and K. Waite, "Prescription Drug Use and Expenditures in California: Key Trends and Drivers," Report prepared for the California HealthCare Foundation," April 2001.
- <sup>17</sup> A. Hillman, M. Pauly, J. Escarce, K. Ripley, M. Gaynor, J. Clouse, and R. Ross, "Financial Incentives and Drug Spending in Managed Care," *Health Affairs* (March/ April) 1999; 18(2): 189-200.
- <sup>18</sup> C. Hoffman, D. Rice, and H.Y. Sung, "Persons with Chronic Conditions: Their Prevalence and Costs," *Journal of the American Medical Association* (13 November 1996): 1473-1479.
- <sup>19</sup> J. Gabel, G. Claxton, E. Holve, J. Pickreign, H. Whitmore, K. Dhont, S. Hawkins, and D. Rowland, "Health Benefits in 2003: Premiums Reach New Highs as Employers Adopt New Cost Sharing Approaches," *Health Affairs* Vol. 22, No. 5: 117-126; and B. Wheatley, "Findings from Leading State Programs", State Coverage Initiatives Issue Brief No.3 (Washington: Academy Health, 2002).

