

EMPLOYER HEALTH BENEFITS
2007 ANNUAL SURVEY

Survey
Design
and
Methods

Survey Design and Methods

The Kaiser Family Foundation and the Health Research and Educational Trust (Kaiser/HRET) conduct this annual survey of employer-sponsored health benefits. For many years the international consulting and accounting firm KPMG Consulting, Inc. (now Bearing Point) supported the study. In 1998, KPMG divested itself of its Compensation and Benefits Practice, and part of that divestiture included donating the annual survey of health benefits to HRET. HRET, a nonprofit research organization, is an affiliate of the American Hospital Association. The Kaiser Family Foundation designs, analyzes, and conducts this survey in partnership with HRET, and also pays for the cost of the survey. HRET subcontracts with researchers at National Opinion Research Center (NORC) at the University of Chicago, who work with Foundation and HRET researchers in conducting the study. Kaiser/HRET retained National Research LLC (NR), a Washington, D.C.-based survey research firm, to conduct telephone interviews with human resource and benefits managers using the Kaiser/HRET survey instrument. From January to May 2007 NR completed interviews with 1,997 firms.

As in past years, Kaiser/HRET asked each participating company as many as 400 questions about its largest health maintenance organization (HMO), preferred provider organization (PPO), point-of-service (POS) plan, and high-deductible health plan with a savings option (HDHP/SO).¹ We continue to ask firms whether or not they offer a conventional health plan and, if so, how much their premium for conventional coverage increased in the last year. However, we do not ask respondents additional questions about the attributes of the conventional plans they offer. Because we have limited information about conventional health plans, we must make adjustments in calculating all plan averages or distributions. In cases where a firm offers only conventional health plans, no information from that respondent is included in all plan averages. The exception is for the rate of premium growth and whether or not the plan is self-funded, for which we have information. If a firm offers a conventional health plan and at least one other plan type, for categorical variables we assign the values from the health plan with the largest enrollment (other than the conventional plan) to the workers in the conventional plan. In the case of continuous variables, covered workers in conventional plans are assigned the weighted average value of the other plan types in the firm.

Last year Kaiser/HRET began asking employers if they had a health plan that was an exclusive provider organization (EPO), – this question is asked again this year. We treat EPOs and HMOs together as one plan type and report the information under the banner of “HMO”; if an employer sponsors both an HMO and an EPO, they are asked about the attributes of the plan with the larger enrollment.

As in past years, this year’s survey included questions on the cost of health insurance, offer rates, coverage, eligibility, enrollment patterns, premiums,² employee cost sharing, covered benefits, prescription drug benefits, retiree health benefits, utilization

¹ HDHP/SO includes high-deductible health plans offered with either a Health Reimbursement Arrangement (HRA) or a Health Savings Account (HSA). Although HRAs can be offered along with a health plan that is not an HDHP, the survey collected information only on HRAs that are offered along with HDHPs. For specific definitions of HDHPs, HRAs, and HSAs, see the introduction to Section 8.

² HDHP/SO premium estimates do not include contributions made by the employer to Health Savings Accounts or Health Reimbursement Arrangements.

management, and employer opinions. Throughout this report, we use the term “in-network” to refer to services received from a preferred provider and “out-of-network” to refer to services received from a non-preferred provider. Family coverage is defined as health coverage for a family of four.

Each year, the survey asks two different questions regarding family premiums. One asks each firm, for each plan type it has, the *percentage increase or decrease in premiums* in the past year. The responses are used to estimate the average annual premium increase (for example, 6.1% for 2007). The other question asks for the *premium dollar amount* for each plan type the firm offers, and the responses to this question are used to estimate average annual premiums (for example, \$12,106 for family coverage in 2007). The percentage increases in premiums from year to year and cumulative percentage increases are calculated from the estimated average annual percentage premium increases (i.e., reflecting responses to the first question). We use these estimates because respondents change from year to year, and the plan with the largest enrollment may have changed or the firm may not have offered the plan type in the prior year. As a result, the two measures are not necessarily consistent. Calculating the percentage increase from the average premiums also results in larger standard errors than the standard errors associated with the percentage increase calculated from the percentage increase question.

Each year, the survey asks firms for the percentage of their employees that earn less than a specified amount. This year, we changed the income threshold from \$20,000 per year, as it has been the last several years, to \$21,000 per year. This threshold is based on the 25th percentile of workers’ earnings as reported by the Bureau of Labor Statistics using data from the National Compensation Survey (2005), the most current data available at the time of the survey design. The threshold is then adjusted to account for the change in workers’ earnings from 2005 to 2006.

Response Rate

Kaiser/HRET drew its sample from a Survey Sampling Incorporated list (based on an original Dun and Bradstreet list) of the nation’s private and public employers with three or more workers. To increase precision, Kaiser/HRET stratified the sample by industry and the number of workers in the firm. Kaiser/HRET attempted to repeat interviews with prior years’ survey respondents (with at least ten employees) who also participated in 2005, 2006, or both. As a result, 1,481 firms in this year’s total sample of 1,997 firms participated in either the 2005, 2006, or both surveys.³ The overall response rate is 49%.

The vast majority of questions are asked only of firms that offer health benefits. A total of 1,839 responding firms indicated that they offered health benefits. The overall response rate of firms that offer health benefits is 50%.

From previous years’ experience, we have learned that firms that decline to participate in the study are less likely to offer health benefits. Therefore, we asked one question to all firms in the study with which we made phone contact where the firm declined to participate. The question was, “Does your company offer or contribute to a health

³ In total, 238 firms participated in 2005 and 2007, 374 firms participated in 2006 and 2007, and 869 firms participated in 2005, 2006, and 2007.

insurance program as a benefit to your employees?" A total of 3,078 firms responded to this question (including 1,997 who responded to the full survey and 1,081 who responded to this one question). Their responses are included in our estimates of the percentage of firms offering health benefits.⁴ The response rate for this question is 75%.

Firm Size and Industry Definitions, Rounding, and Imputation

Throughout the report, exhibits categorize data by size of firm, region, and industry. Firm size definitions are as follows: All Small, 3 to 199 workers; and All Large, 200 or more workers. Occasionally, firm size categories will be broken into smaller groups. The All Small group may be categorized by: 3 to 24 workers, and 25 to 199 workers; or 3 to 9 workers, 10 to 24 workers, 25 to 49 workers, and 50 to 199 workers. The All Large group may be categorized by: 200 to 999 workers, 1,000 to 4,999 workers, and 5,000 or more workers. Exhibit M.1 shows detailed characteristics of the survey sample. Exhibit M.3 identifies which states are in each region.

Exhibit M.2 displays the distribution of the nation's firms, workers, and covered workers (employees receiving coverage from their employer). Among the over three million firms nationally, approximately 60% are firms employing 3 to 9 workers; such firms employ 9% of workers and 6% of covered workers. In contrast, less than one percent of firms are firms employing 5,000 or more workers; these firms employ 34% of workers and 36% of covered workers. Therefore, the smallest firms dominate any national statistics about what employers in general are doing. In contrast, firms with 5,000 or more workers are the most important employer group in calculating statistics regarding covered workers, since they employ the largest percentage of the nation's workforce.

The Kaiser/HRET survey compares premium increases to changes in workers' hourly wages and overall inflation, both obtained from the Bureau of Labor Statistics (BLS). Workers' hourly wage change is calculated from the Current Employment Statistics Survey (CES)⁵ using seasonally adjusted data for private workers. Overall inflation is calculated using the Consumer Price Index US city average for all urban consumers (CPI-U).⁶ We report annual increases in these data from April of the prior year to April of the current year because this is typically the field time of the survey.

Some exhibits in the report do not sum up to totals due to rounding effects. In a few cases, numbers from distribution exhibits may not add to equal numbers referenced in the text due to rounding effects. Throughout the report, while overall totals as well as totals for size and industry are statistically valid, some breakdowns may not be available due to limited sample sizes. In instances where the sample size is fewer than 30, exhibits include the notation NSD (Not Sufficient Data).

To control for item nonresponse bias, Kaiser/HRET imputes values that are missing for most variables in the survey. On average, less than five percent of these observations

⁴ Estimates presented in Exhibits 2.1 and 2.2 are based on the sample of both firms that completed the entire survey and those that answered just one question about whether they offer health benefits.

⁵ U.S. Department of Labor, Bureau of Labor Statistics (2007). *Current Employment Statistics*. <http://www.bls.gov/ces/home.htm>.

⁶ U.S. Department of Labor, Bureau of Labor Statistics (2007). *Consumer Price Indexes*. <http://www.bls.gov/cpi/home.htm>.

are imputed for any given variable. In prior years, many variables were imputed following a hotdeck approach, while others followed a distributional approach (where values were randomly determined from the variable's distribution, assuming a normal distribution). This year, all variables are imputed following a hotdeck approach. This imputation method does not rely on a normal distribution assumption and replaces missing values with observed values from a firm with similar characteristics, in this case, size and industry. Due to the low imputation rate for most variables, the change in methodology is not expected to have a major impact on the results. In some cases, due to small sample size, imputed outliers are excluded. There are a few variables that Kaiser/HRET has decided should not be imputed; these are typically variables where "don't know" is considered a valid response option (for example, firms' opinions about effectiveness of various strategies to control health insurance costs).

Weighting and Statistical Significance

Because Kaiser/HRET selects firms randomly, it is possible through the use of statistical weights to extrapolate the results to national (as well as firm size, regional, and industry) averages. These weights allow Kaiser/HRET to present findings based on the number of workers covered by health plans, the number of total workers, and the number of firms. In general, findings in dollar amounts (such as premiums, worker contributions, and cost sharing) are weighted by covered workers. Other estimates, such as the offer rate, are weighted by firms. Specific weights were created to analyze the HDHP/SO plans that are offered with an HRA or that are HSA qualified. These weights represent the proportion of employees enrolled in each of these arrangements.

Calculation of the weights follows a common approach. First, the basic weight is determined, followed by a nonresponse adjustment. As part of this nonresponse adjustment, Kaiser/HRET conducted a small follow-up survey of those firms with 3 to 49 workers that refused to participate in the full survey. We applied an additional nonresponse adjustment to the weight to reflect the findings of this survey.

Next, we trimmed the weights in order to reduce the influence of weight outliers. First, we identified common groups of observations. Within each group, we identified the median and the interquartile range of the weights and calculated the trimming cut point as the median plus six times the interquartile range ($M + [6 * IQR]$). Weight values larger than this cut point are trimmed to the cut point. In all instances, less than one percent of the weight values were trimmed.

Finally, we applied a post-stratification adjustment. We used the U.S. Census Bureau's 2004 Statistics of U.S. Businesses as the basis for the stratification and the post-stratification adjustment for firms in the private sector, and we used the 2002 Census of Governments as the basis for post-stratification for public sector firms.

The survey contains a few questions on employee cost sharing that are asked only of firms that indicate in a previous question that they have a certain cost-sharing provision. For example, the copayment amount for prescription drugs is asked only of those that report they have copayments for prescription drugs. Because the composite variables are reflective of only those plans with the provision, separate weights for the relevant variables were created in order to account for the fact that not all covered workers have such provisions.

The data are analyzed with SUDAAN,⁷ which computes appropriate standard error estimates by controlling for the complex design of the survey. All statistical tests are performed at the .05 level unless otherwise noted. For figures with multiple years, statistical tests are conducted for each year against the previous year shown, unless otherwise noted. No statistical tests are conducted for years prior to 1999.

Statistical tests for a given subgroup (firms with 25-49 workers, for instance) are tested against all other firm sizes not included in that subgroup (all firm sizes NOT including firms with 25-49 workers in this example). Tests are done similarly for region and industry; for example, Northeast is compared to all firms NOT in the Northeast (an aggregate of firms in the Midwest, South, and West). However, statistical tests for estimates compared across plan types (for example, average premiums in PPOs) are tested against the "All Plans" estimate. In some cases, we also test plan specific estimates against similar estimates for other plan types (for example, single and family premiums for HDHP/SOs against single and family premiums in HMO, PPO, and POS plans); these are noted specifically in the text. The two types of statistical tests performed are the t-test and the Pearson Chi-square test.

The small number of observations for some variables, particularly variables specific to plans with Health Savings Accounts or Health Reimbursement Arrangements, resulted in large variability around the point estimates. These observations sometimes carry large weights, primarily for small firms. The reader should be cautioned that these influential weights may result in large movements in point estimates; however, often these movements are not statistically significant.

Historical Data

Data in this report focus primarily on findings from surveys jointly authored by the Kaiser Family Foundation and the Health Research and Educational Trust, which have been conducted since 1999. Prior to 1999, the survey was conducted by the Health Insurance Association of America (HIAA) and KPMG using a similar survey instrument, but data is not available for all the intervening years. Following the survey's introduction in 1987, the HIAA conducted the survey through 1990, but some data are not available for analysis. KPMG conducted the survey from 1991-1998. However, in 1991, 1992, 1994, and 1997, only larger firms were sampled. In 1993, 1995, 1996, and 1998, KPMG interviewed both large and small firms.

This report uses data from the 1993, 1996, and 1998 KPMG Surveys of Employer-Sponsored Health Benefits and the 1999-2007 Kaiser/HRET Survey of Employer-Sponsored Health Benefits. For a longer-term perspective, we also use the 1988 survey of the nation's employers conducted by the HIAA, on which the KPMG and Kaiser/HRET surveys are based. Many questions in the HIAA, the KPMG, and Kaiser/HRET surveys are identical. The survey designs among the three surveys are also similar.

⁷ Research Triangle Institute (2005). SUDAAN Software for the Statistical Analysis of Correlated Data, Release 9.0.1, Research Triangle Park, NC: Research Triangle Institute.

**Exhibit M.1
Selected Characteristics of Firms in the Survey Sample, 2007**

	Sample Size	Sample Distribution After Weighting	Percentage of Total for Weighted Sample
FIRM SIZE			
3-9 Workers	113	2,008,130	60%
10-24 Workers	219	782,281	23
25-49 Workers	158	278,794	8
50-199 Workers	279	207,484	6
200-999 Workers	453	58,523	2
1,000-4,999 Workers	454	16,625	<1
5,000 or More Workers	321	8,114	<1
ALL FIRM SIZES	1,997	3,359,951	100%
REGION			
Northeast	403	666,911	20%
Midwest	578	790,240	24
South	655	1,139,353	34
West	361	763,447	23
ALL REGIONS	1,997	3,359,951	100%
INDUSTRY			
Agriculture/Mining/Construction	107	405,838	12%
Manufacturing	260	214,692	6
Transportation/Communications/Utilities	93	127,602	4
Wholesale	110	199,304	6
Retail	140	442,618	13
Finance	142	231,270	7
Service	743	1,488,230	44
State/Local Government	223	48,475	1
Health Care	179	201,922	6
ALL INDUSTRIES	1,997	3,359,951	100%

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2007.

Exhibit M.2
Distribution of Employers, Workers, and Workers Covered by Health Benefits, by Firm Size, 2007

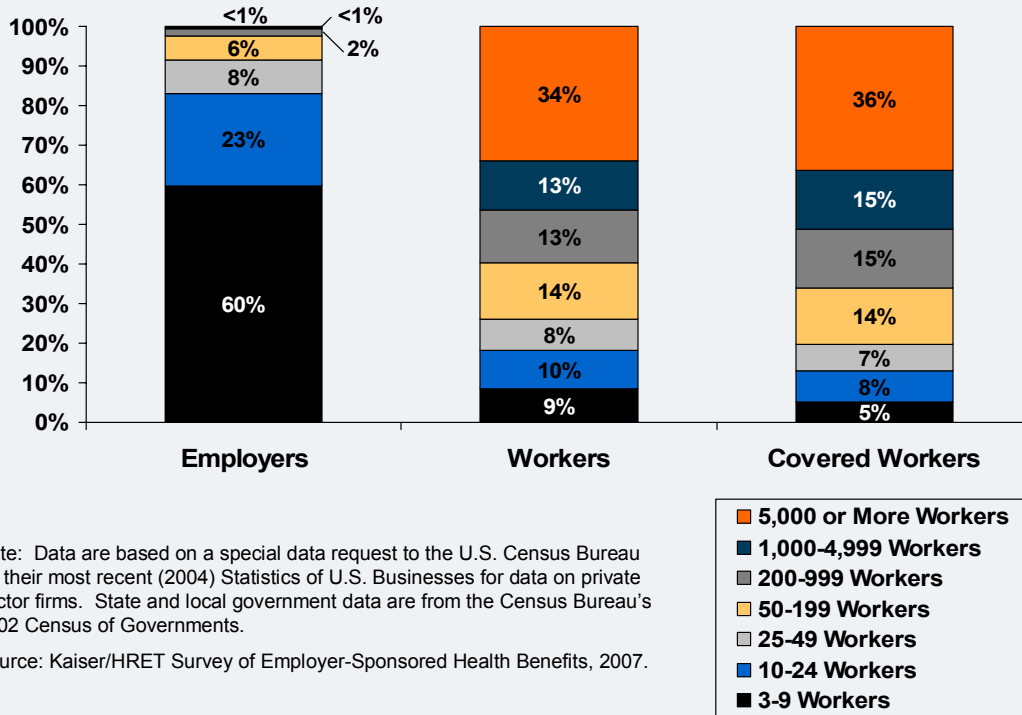


Exhibit M.3
States by Region, 2007

Northeast	Midwest	South	West
Connecticut	Illinois	Alabama	Alaska
Maine	Indiana	Arkansas	Arizona
Massachusetts	Iowa	Delaware	California
New Hampshire	Kansas	District of Columbia	Colorado
New Jersey	Michigan	Florida	Hawaii
New York	Minnesota	Georgia	Idaho
Pennsylvania	Missouri	Kentucky	Montana
Rhode Island	Nebraska	Louisiana	Nevada
Vermont	North Dakota	Maryland	New Mexico
	Ohio	Mississippi	Oregon
	South Dakota	North Carolina	Utah
	Wisconsin	Oklahoma	Washington
		South Carolina	Wyoming
		Tennessee	
		Texas	
		Virginia	
		West Virginia	

Source: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau. Available at http://www.census.gov/geo/www/us_regdiv.pdf.