



## Employer Health Insurance Costs and Worker Compensation March 2008

Health insurance premiums have increased rapidly over the recent past, growing a cumulative 78 percent between 2001 and 2007 and far outpacing cumulative wage growth of 19 percent over the same period.<sup>1</sup> These figures, which have been widely cited to demonstrate the growing burden of health insurance costs on employers and employees, illustrate overall trends in health benefit costs, but they do not show how this growing burden is affecting employers and employees in different settings. To address this issue, this analysis shows employer costs for payroll and health benefits over a six-year period for workers in different occupations and at different establishment sizes.

Our analysis focuses on employer costs for health insurance for workers with access to health benefits. Employer costs for health insurance increased significantly as a percentage of payroll between 1999 and 2005, and varied meaningfully across the workforce when viewed as cost per hour worked or as a percentage of payroll. Employer costs per hour for health insurance were higher for workers in higher wage occupations than for workers in lower wage occupations, but overall employer costs represented a lower percentage of payrolls for workers in high wage occupations than for workers in low wage occupations.

This information can be used by policy makers in several ways. By showing the large variation in health benefit costs across establishments and occupations, this information helps policy makers better understand the issues facing different types of businesses and workers. In addition, health care reform proposals often contain requirements for firms to contribute financially towards the costs of expanding coverage. We show that employer costs as percentage of payroll vary significantly across workers and settings, highlighting the challenge facing policy makers trying to establish percentage of payroll requirements that may be considered equitable across different settings.

Our analysis is based on data from the National Compensation Survey (NCS), which is a nationwide survey of labor costs in private and public establishments conducted quarterly by the Bureau of Labor Statistics (BLS).<sup>2</sup> Information is provided on employer costs for health insurance for employees with access to health benefits through their employer. Details about the NCS and our analysis are available in a methodological appendix at the end of this analysis, although several facts should be highlighted upfront. First, the data reflect employer costs for health insurance and do not include additional amounts that employees might contribute toward the costs of their coverage. Second, employer costs are affected by enrollment in, and in some cases by eligibility for, health benefits offered by employers. For example, employers may impose a waiting period before newly hired employees are eligible to enroll for health benefits, but these employees are treated as having access to health benefits in the data because most similar workers would be eligible after some period of tenure with the firm.

### Definitions of key terms:

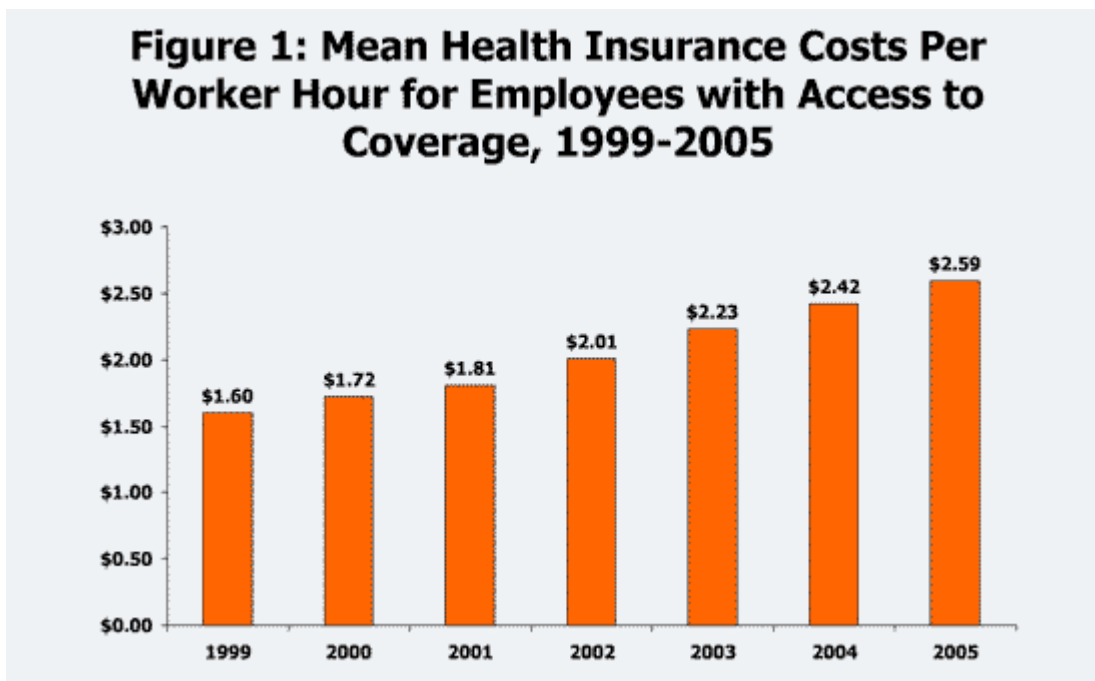
- Payroll costs include employer payments for wages, salary, overtime,

vacation, holiday, sick days, bonus, and other cash compensation to employees, excluding severance payments and unemployment benefits.

- **Health costs** include all employer payments for health coverage, excluding employee contributions to premiums or out-of-pocket medical cost-sharing.
- **Non-health fringe benefits** include employer payments for life and short-term disability insurance, defined benefit and defined contribution plans, worker's compensation, Social Security, and Medicare.
- **Total compensation** is defined as the sum of payroll and all fringe benefit costs including health.
- **Establishment size** is the number of employees at a selected plant or office. Firms may be made up of one or more establishments.

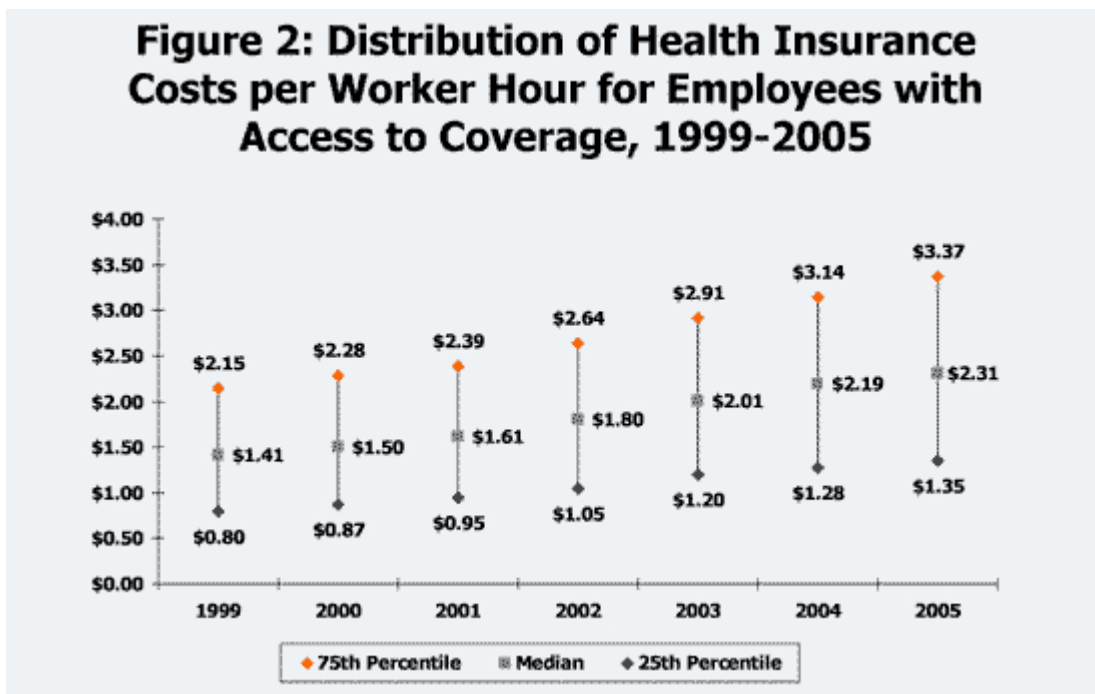
### Employer Costs for Health Insurance

Among workers with access to health benefits, average employer costs for health insurance per employee hour rose from \$1.60 to \$2.59 during the 1999 to 2005 period (Figure 1). This almost 62 percent increase in average costs per hour is much larger than the 23 percent increase in average employer payroll costs per hour for these workers.



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999-2005, conducted by the Bureau of Labor Statistics.

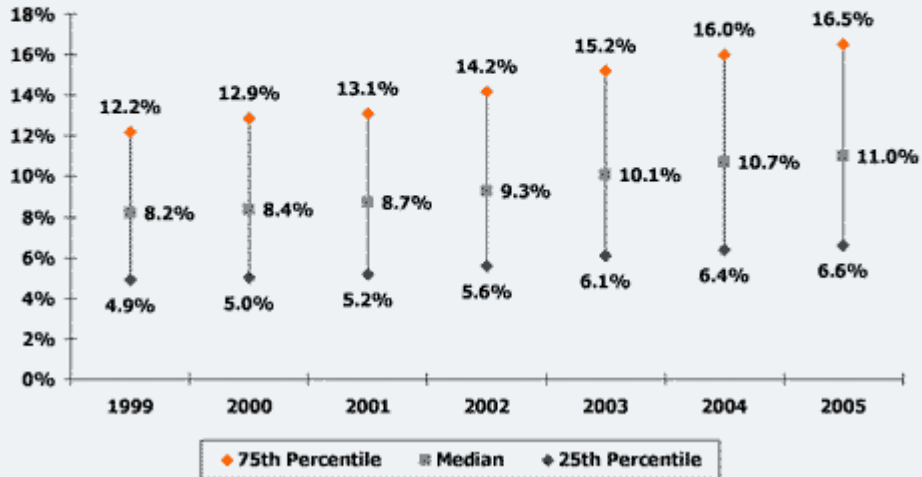
Employer hourly costs varied significantly across workers within years, and this variation remained fairly consistent over the period (Figure 2). Looking at 2005 for example, the difference between employer costs at the 25th percentile (\$1.35) and 75th percentile (\$3.37) was just over \$2.00 per hour, or about one-and-a-half times as large. These costs per hour can vary for a number of reasons, including: differences across plans in benefits and cost sharing, differences in premium shares borne by employers, differences in the demographic characteristics of workers in sampled establishments (e.g., average age, health status), differences in employee and dependent participation in health benefits, and geographic differences in the costs of health care. For example, workers may have relatively higher employer costs per hour for health insurance because they receive generous benefits, they have an employer that pays a large share of the premium, or they work for an employer with an older workforce or located in an area with relatively expensive costs for health care and/or other goods.



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999-2005, conducted by the Bureau of Labor Statistics.

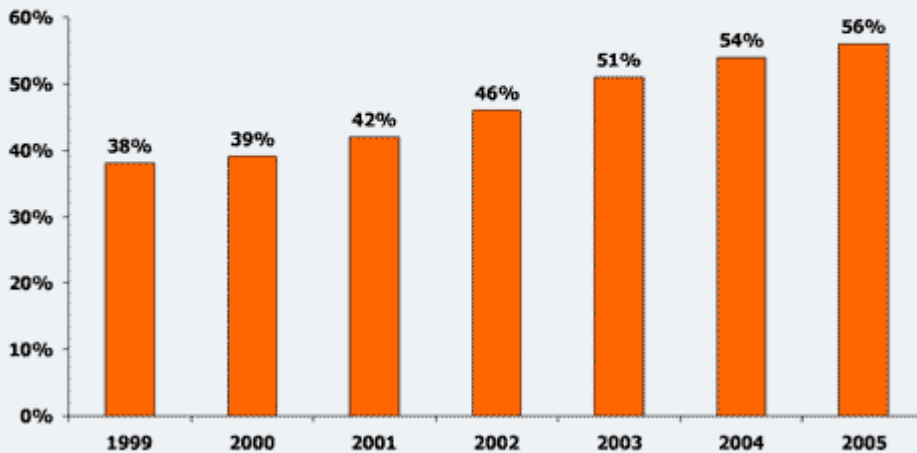
Employer costs for health insurance viewed as a percentage of payroll also showed significant variation (Figure 3). In 2005, the median employer cost was 11 percent of payroll, but 25 percent of workers with access to health benefits had employer costs for health insurance that were equal to or less than 6.6 percent of their payroll costs and another 25 percent had employer costs for health insurance that were equal to or exceeded 16.5 percent of their payroll costs. Overall, the percentage of workers in jobs where employer costs for health insurance exceeded 10 percent of payroll rose from 38 percent to 56 percent between 1999 and 2005 (Figure 4).

**Figure 3: Distribution of Health Coverage Costs as a Percentage of Payroll for Employees with Access to Coverage, 1999-2005**



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999-2005, conducted by the Bureau of Labor Statistics.

**Figure 4: Percent of Workers with Health Costs Greater than 10% of Payroll for Employees with Access to Coverage, 1999-2005**



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999-2005, conducted by the Bureau of Labor Statistics.

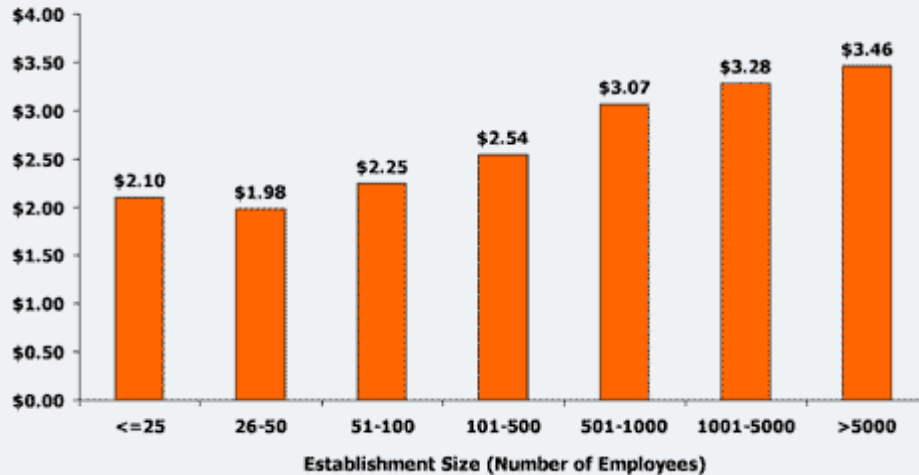
Figures 3 and 4 have important implications for policy options that would require employers to devote a minimum percentage of payroll to health benefits. The wide variation in employer costs as a percentage of payroll means there is not a typical or common percentage of payroll for health care that relates to most jobs. This suggests it would be quite difficult to develop a percentage of payroll requirement that would maintain the status quo for employers that do offer coverage or put employers that offer and do not offer on an equal basis with respect to health benefits.<sup>3</sup> The steady increase over time throughout the distribution suggests that a static percentage of payroll requirement would become less connected to actual health insurance costs as they increase over time and become a larger share of payroll.

### **Employer Health Costs by Establishment Size**

In 2005, average employer costs per worker hour for health insurance generally rose with establishment size (Figure 5). This pattern may indicate that benefits are more generous in larger establishments, which would be consistent with the overall higher average levels of total compensation in large establishments.<sup>4</sup> Participation by employees and dependents in health benefit offerings may also be higher in large establishments. Results from the Kaiser/HRET Annual Employer Health Benefits Survey show that the percentage of workers covered by their firm who elect family coverage (rather than single coverage) rises with firm size.<sup>5</sup> Employer costs for a family policy are usually larger than for single coverage.

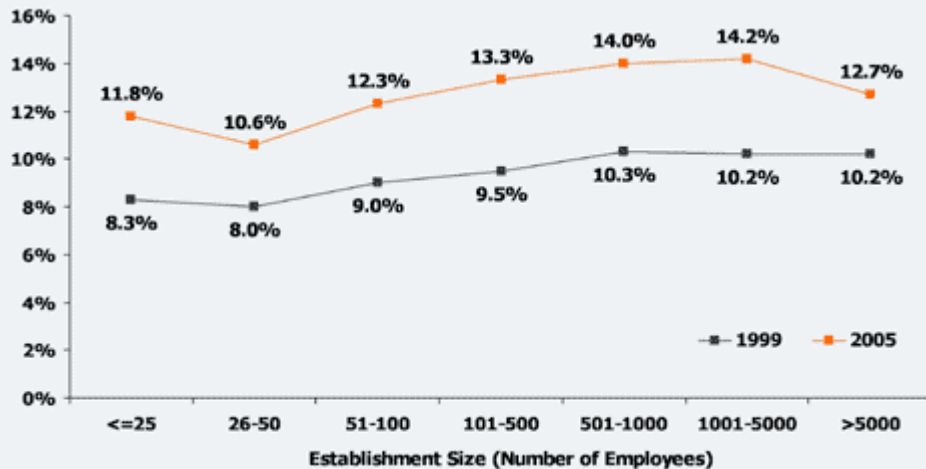
Between 1999 and 2005, employer costs for health insurance increased as a percentage of payroll for all establishment sizes, with increases ranging from about 2.5 to 4 percentage points (Figure 6). While costs as a percentage of payroll generally were higher at larger establishments than for smaller ones, there were some exceptions to the pattern and the differences are not as large as those for costs per hour (Figure 5). An important factor here is that compensation other than health insurance also tends to rise with establishment size.<sup>6</sup> So, while employer costs per hour for health insurance were higher for larger establishments, so were their other costs, making the relationship between the two less straightforward.

**Figure 5: Average Hourly Health Insurance Costs for Employees with Access to Coverage, by Establishment Size, 2005**



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 2005, conducted by the Bureau of Labor Statistics.

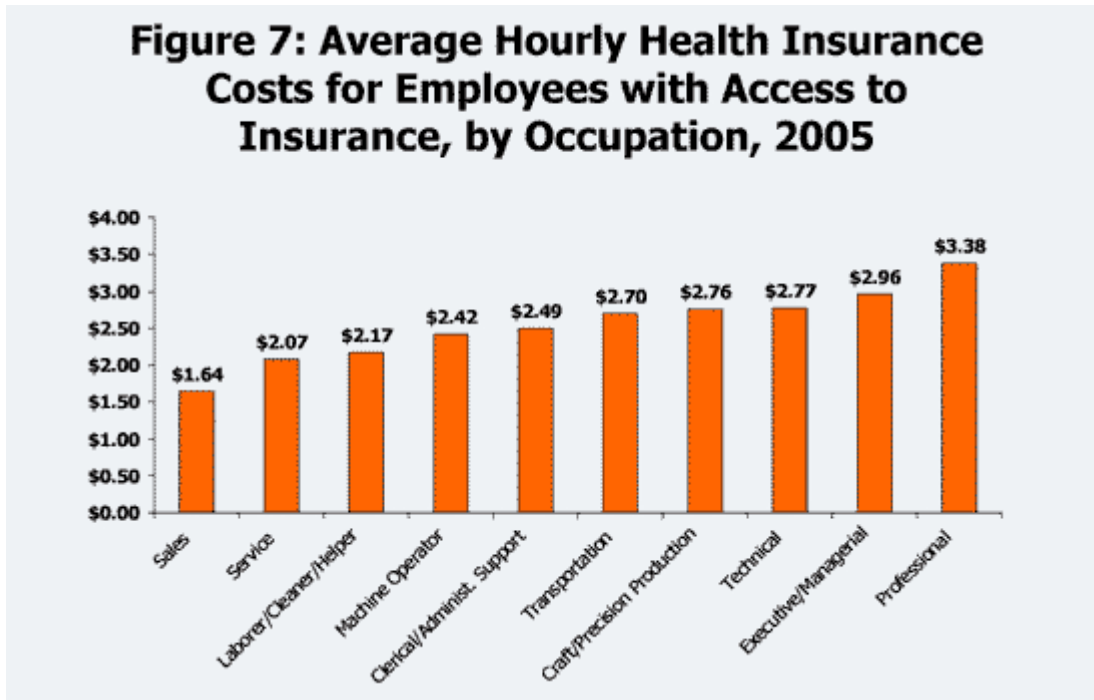
**Figure 6: Average Health Insurance Costs as a Share of Payroll for Employees with Access to Coverage, by Establishment Size, 1999 and 2005**



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999 and 2005, conducted by the Bureau of Labor Statistics.

## Employer Health Costs by Occupation

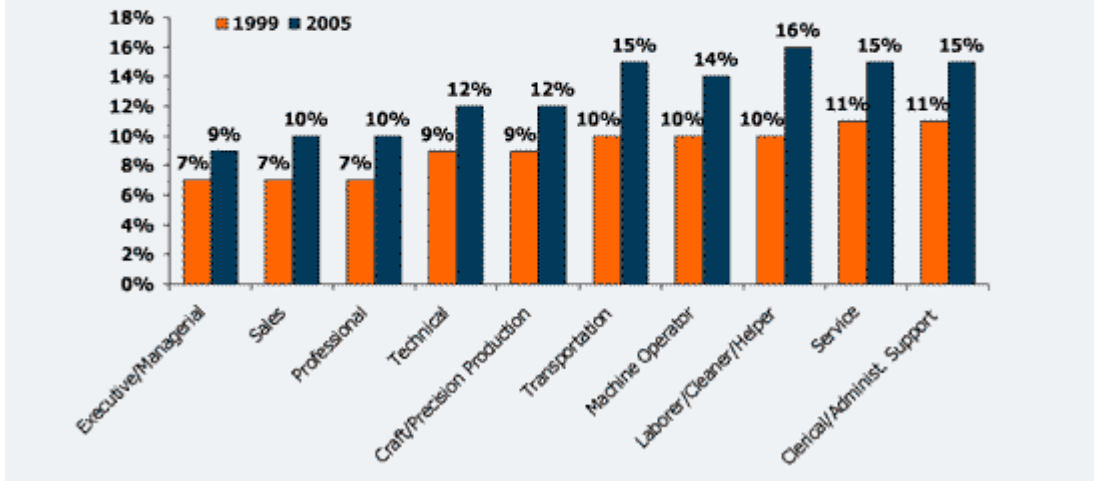
Average employer costs for health insurance costs varied in 2005 from \$1.64 per hour for workers in sales-related occupations to \$2.96 for executives and managers and \$3.38 for professionals (Figure 7). As discussed above, these differences may be driven by a number of factors, including benefit generosity and differences in benefit participation by workers and dependents.



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 2005, conducted by the Bureau of Labor Statistics.

Figure 8 shows, for both 1999 and 2005, average health insurance costs as a percentage of payroll costs by occupation. It is worth noting that although technical, executive/managerial, and professional occupations had some of the highest health costs per hour (Figure 7), as a share of payroll their costs were relatively low, reflecting the relatively higher wages in these jobs. For service and laborer/cleaner/helper occupations, the levels of costs were relatively low, but comparatively high as a percentage of payroll. Looking at the change over the 1999 to 2005 period, health costs increased relative to payroll for all occupations. However, the size of this change was largest for those with health costs that were large relative to payroll, such as transportation, machine operators, laborers/cleaners/helpers, service, and clerical/administrative support occupations.

**Figure 8: Average Health Insurance Expenses as a Share of Payroll for Employees with Access to Coverage, by Occupation, 1999 and 2005**



Source: Kaiser Family Foundation calculations based on data from the National Compensation Survey, 1999 and 2005, conducted by the Bureau of Labor Statistics.

## Discussion

The data presented in this paper explore the much-noted increase in health care costs as it relates to worker compensation. Although rising health costs have affected all employers and employees with health benefits, there is still a relatively wide range of cost exposure over time and by occupation and establishment size. Health insurance costs for employees in lower paid occupations were smaller in hourly dollar amounts, but made up a larger percentage of payroll due to their lower average earnings. Larger establishments had greater health benefit costs, both on an hourly basis and relative to payroll costs, even though their payroll costs were greater.

The data presented have implications for policy makers trying to establish a funding mechanism for health insurance coverage based on worker payroll. Half of all employees who had access to coverage in 2005 had health insurance expenses that were at least 11 percent of payroll costs. Only 25 percent had expenses that were less than 6.6 percent of payroll. On an hourly basis, employee health insurance costs at least \$2.31 for half of all employees in 2005. These figures for hourly health costs and percentage of payroll costs are substantially larger than those discussed in the context of state coverage reforms. Moreover, employer costs for health insurance rose steadily and rather significantly over the period, suggesting that an employer requirement established at a static percentage of payroll would become less related to the actual cost of health insurance over time.

This paper was prepared by Paul Jacobs and Gary Claxton. The Kaiser Family Foundation gratefully acknowledges assistance provided by Keenan Dworak-Fisher, Ph.D. and Michael

Lettau, Ph.D. of the Office of Compensation and Working Conditions at the Bureau of Labor Statistics in accessing, analyzing, and understanding the Employment Cost Index data.

## Methodological Appendix

The Employment Cost Index (ECI) is a nationwide survey of labor costs in private and public establishments conducted quarterly by the Bureau of Labor Statistics (BLS). The ECI was developed in the mid-1970s to track changes in the costs of employment. Later modifications added data about health and other fringe benefits. Since about 2003, the ECI sample was merged with a broader group of surveys on employer benefits and payroll costs collectively referred to as the National Compensation Survey (NCS).<sup>7</sup>

ECI/NCS data are constructed by first choosing establishments in private industry and in state and local governments in the 50 states and the District of Columbia. Federal government, agriculture, and private household establishments are excluded from the sample. Then the survey collects information about the costs of employment for up to eight job classifications in each establishment that is surveyed. The data are collected for job classifications, rather than for individual workers, so that continuity within establishments may be maintained over time as individual workers enter and exit the establishment. Jobs are sampled proportional to their prevalence at the establishment. For instance, in a plant which produces coal, separate wage and benefits costs for miners, engineers, and truck drivers may be obtained by the survey, whereas other jobs with fewer employees, such as for accountants and crane operators, may be excluded. The data we use are nevertheless representative of all workers in the United States as of June of each calendar year. The exhibits and calculations are presented on a per-worker-hour basis and include all employees in sampled jobs where health benefits are available, including those that are seasonal, part-time, or temporary. We use data each year from 1999 to 2005.

The data reflect contributions by employers for the cost of health insurance and do not include amounts that employees are required to contribute for their share of the premiums. Thus, the costs shown above do not comprise the full costs of health coverage for employees, and readers should be mindful of this factor when interpreting results. For example, occupations where employers tend to pay a higher share of the total premium cost would have higher employer costs per hour than occupations with lower employer shares, even if benefits levels (e.g., deductibles) and other factors did not differ across the occupations. Readers also should be aware that employer costs for benefits in a job classification are averaged over all of the workers in that job classification, even if workers do not participate in the benefit. As examples, employees offered health benefits may choose not to take them up and new employees may face an exclusion period before they are eligible for benefits from the employer. Thus, differences in employer costs across job classifications or over time may to some extent reflect different participation rates for workers and their dependents.

Hourly costs for payroll and health insurance are provided by the Bureau of Labor Statistics and we used these estimates because they adjust for differences in the number of hours worked annually among employees. Hourly cost of payroll was calculated by combining hourly costs for wages, overtime, vacation pay, sick pay, as well as bonuses and other paid leave. Because the data are collected from establishments, not firms, firm-level characteristics, e.g. firm size, are not available. The paper avoids the use of the term firm, although it uses the terms "employer" and "establishment" synonymously although they may not be equal.

The BLS provides survey weights which enable the researcher to calculate statistics which are representative of workers in the United States in a given year. An adjustment to these weights was made to correct for changes in the composition of industries and occupations in the United States over time. This adjustment allows for a more accurate comparison of figures over time, but only very marginally affected the results presented in this paper.

BLS researchers impute missing data for hourly values when respondents do not provide sufficient data to calculate them. 4.6 percent of observations were missing a response to the question of whether health insurance was offered to workers holding that particular job. Rather than impute a value for these observations, for all statistics, these observations were excluded from our sample.

The Kaiser Family Foundation obtained access to the ECI/NCS through an agreement with the BLS. All analyses were performed on site at the BLS headquarters in Washington D.C. from May to August of 2007 by Kaiser Family Foundation staff.

#### Notes:

1. Kaiser Family Foundation/Health Research and Educational Trust, Employer Health Benefits 2007 Annual Survey. Available online at: <http://www.kff.org/insurance/7672/index.cfm>.

2. As part of the National Compensation Survey, the Bureau of Labor Statistics collects these data quarterly to develop the Employment Cost Index (ECI) which is designed to measure changes in compensation costs for the civilian workforce. Other details on how the statistics were derived from the ECI data are reported in the Methodological Appendix at the back of this report.

3. Variation at the employer level is somewhat different than the worker-level variation in costs shown here (because many employers have multiple job classifications that may "average-out" some of the worker-level variation). These worker-level statistics would not necessarily reflect the size or distribution of costs borne by employers under coverage mandates requiring fees defined as a certain percentage of total firm payroll. For an establishment-level analysis of health costs using the NCS data, see: Christine Eibner, Kanika Kapur, and M. Susan Marquis, "Employer Health Insurance Costs in the United States," California HealthCare Foundation, July 2007, available online at: [www.chcf.org/documents/insurance/EmployerHICostsUS.pdf](http://www.chcf.org/documents/insurance/EmployerHICostsUS.pdf).

4. In our sample of workers with access to health benefits in 2005, the mean hourly rate of total compensation, including payroll, health benefits, and non-health fringe benefits, was \$22.47 for establishments with less than 25 employees and \$37.97 for those with more than 5000 employees. These mean compensation rates grew more or less steadily as establishment size increased.

5. About 34% of workers in firms with 3-199 employees enrolled in family coverage, while about 40% of workers in firms with 200 or more employees did the same. Kaiser Family Foundation/Health Research and Educational Trust, Employer Health Benefits 2007 Annual Survey.

6. See, e.g., Julia I. Lane, Laurie A. Salmon, and James R. Spletzer, "Establishment wage differentials," *Monthly Labor Review*, April 2007. Available online at: <http://www.bls.gov/opub/mlr/2007/04/art1abs.htm>.

7. More information about the ECI and the NCS is available online at: <http://www.bls.gov/ncs/home.htm>.