Study of the Administrative Costs and Actuarial Values of Small Health Plans

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I. Executive Summary

Access to health insurance has become an important goal for state governments and the Federal government. Less than half of all small firms with fewer than 50 employees (47%) offer health plans while 97% of all firms with 50 or more employees offer health plans (MEPS data for 2000). Price is the major factor affecting small firms' ability to offer health insurance for its employees. Small health plans have higher administrative expenses than larger employers in the form of higher broker commissions, underwriting expenses and other expenses related to operating a health plan. Small health plans tend to have slightly more cost sharing (deductibles and coinsurance) and slightly less generous coverage of specific benefits than larger health plans.

It is important to document and analyze the administrative expenses and the generosity of health plans in order to be able to evaluate the small group reform and tax credit programs proposed by state governments and the Federal government. Comprehensive data on administrative expenses, cost sharing, and covered benefits are needed to estimate the costs of legislative proposals and changes to existing programs. Despite the importance of administrative costs of small health plans, the actual level of administrative costs and variation by type of health plan has never been systematically studied.

This report provides the first documented detailed data available for analysis of this important barrier to small group health insurance coverage. We collected premium components of small group insurance plans from two state insurance departments, obtained broker commissions of small group plans from webpages and interviewed state insurance department officials and insurance executives. We also analyzed firm characteristics, plan benefits, and premiums from the 1997 Robert Wood Johnson Survey (RWJ).

We were able to obtain rate filings for small group insurers in West Virginia and

Colorado. Administrative expenses averaged 25% for four insurers in West Virginia and 27% for fifteen insurers in Colorado. General administration averaged 10%-11%, commissions averaged 4% in West Virginia and 11% in Colorado, profit/contingency margins averaged 4%-5%, and premium taxes, licenses and fees averaged 2%-3%. Average broker commissions for small group plans found on Internet webpages were about 6%. The 25% to 27% administrative expenses as a percentage of premiums found in West Virginia and Colorado is equivalent to 33% to 37% expenses as a percentage of claims. Larger health plans are able to self-insure with administrative expenses of 5% to 11% of claims.

Actuarial value measures the portion of total health care costs covered by a health plan that is paid by the insurer and incorporates the effect of cost sharing by the consumer (deductibles, copayments, coinsurance) and whether certain health services are covered (e.g., dental, prescription drugs. mental health) or have limits (number of days/visits or dollar amount). The higher the actuarial value, the more generous the health plan benefits. We analyzed the benefits of health plans in the 1997 RWJ survey and found that actuarial value increases slightly with firm size, from 78% for firm size 1-9 employees to 83% for firm size 1000 and more employees. Deductibles decreased with firm size while copayments and coinsurance increased with firm size. Premiums did not vary much by firm size except that the largest firm size had the largest family premiums. Data from 1996-2000 MEPS showed that small firms with 50 or fewer employees had slightly higher premiums for single coverage than firms overall. Family premiums were similar by firm size for firms with more than 50 employees.

This report also provides an overview of the small group health insurance market, including discussion of premiums, cost sharing, administrative expenses, government regulation, health purchasing alliances, association health plans, and basic health plans.

II. Literature Review

Several annual surveys report premiums and employee contributions by firm size. We reviewed two major series of surveys, the Kaiser/Health Research and Educational Trust (HRET) (previously sponsored by KPMG) and the Medical Expenditure Panel Surveys (MEPS) conducted by the DHHS Agency for Healthcare Research and Quality. Kaiser/HRET has more recent data (up to the year 2002) but has a much smaller sample size (fewer than 2000 firms) than the MEPS (approximately 40,000 establishments per year for 1996-2000). Data on the smallest sizes are not always available for Kaiser/HRET because of insufficient numbers of plans reporting.

A. Premiums and Cost Sharing

1. KPMG/Kaiser/HRET

KPMG and later Kaiser/HRET (Health Research Educational Trust) conducted surveys of employers with similar methodologies. These surveys used Dun and Bradstreet's list of private firms for a sampling frame and the samples were stratified by firm size, industry, and region to allow calculation of weighted averages that represent national estimates. These surveys generally have 1600-2000 responses (50% to 60% response rates) from health plans of employers with 3 or more employees. KPMG conducted three surveys in 1993, one survey of firms with 50-199 employees, another survey with 200 or more employees and together with Wayne State University, KPMG conducted a survey of small firms with 1-49 employees. Morrisey, Jensen, and Morlock (1994) participated in the survey of small firms and compared data from all three surveys. Small and large firms paid similar monthly premiums but cost sharing was greater for small firms, implying that the value of the benefits obtained per dollar of premium was lower for small firms. In 1993, the average annual deductible in conventional fee-

for-service plans was $311 for single coverage for small firms with 1-49 employees and $222 for large firms with 50 or more employees while the deductible was $695 for family coverage for small firms and $498 for large firms. PPO in-plan deductibles averaged $266 per person for small firms and $161 for large firms.

Gabel, Ginsburg and Hunt studied the health plans of small firms using the HIAA survey of employers for 1988 (KPMG followed the original HIAA methodology), and the KPMG Peat Marwick surveys of 1993 and 1996 (Gabel et al 1997). The percentage of premium paid by employees was significantly higher for firms with fewer than 10 employees compared to overall large firms (200+ employees) for single coverage (18% vs. 13% in 1988 and 35% vs. 22% in 1996). For family coverage, the smallest firms had similar employee shares in 1988 (28% vs. 29%) and a higher share in 1996 (38% vs. 30%). The smallest firms also had lower employee shares than firms with fewer than 200 employees.

Kaiser Family Foundation sponsored a survey of small employers in 1998 (Gabel et al 1999). Premiums in 1996 and 1998 grew faster for smaller firms. The 1996 increase was 3.0% for firms of 3-9 employees, 2.2% for firms with 10-24 employees, 2.6% for firms with 25-49 employees, 0.7% for firms with 50-199 employees and 0.5% for large firms with 200 or more employees. The 1998 increase was 8.0% for firms with 3-9 employees, 4.6% for firms with 10-24 employees, 6.1% for firms with 249 employees, 3.7% for firms with 50-199 employees, and 3.3% for large firms. Monthly premiums were higher for the small firms in 1998 (no significant difference in 1996). Monthly premiums for single coverage were $204 for firms with 3-9 employees, $165 for firms with 10-24 employees, $184 for firms with 25-40 employees, $180 for firms with 50-199 employees, and $173 for large firms. Monthly premiums for family coverage were $520 for firms with 3-9 employees, $409 for firms with 10-24 employees, $449

for firms with 25-40 employees, $446 for firms with 50-199 employees, and $462 for large firms. Firms with 3-9 employees had the highest premiums and the highest increases in premiums.

Tables 1 and 2 show data from the Kaiser/HRET Surveys for 1998-2002 (Kaiser/HRET). The experience of premiums and employee contribution was mixed. The average single premiums were highest for the smallest firms with 3-9 employees but the differences from the averages for all plans were not significant. Average family premiums and average single contributions showed no pattern. Family contributions for smaller firms were generally higher than for firms overall. The increase in premiums was greater for firms with fewer than 50 employees (3-9, 10-24, and 25-49 employees) in most cases. Deductibles for firms decreased with firm size for PPO and POS health plans and decreased with firm size of fewer than 200 for conventional (FFS fee-for-service or non-managed care) plans.

2. MEPS

The Medical Expenditure Panel Survey Insurance Component (MEPS-IC) is an annual survey of about 40,000 establishments with at least one employee conducted by the DHHS Agency for Healthcare Research and Quality. Response rates are usually 70-75%. Questions are asked about whether health insurance is offered to employees, percentage of employees eligible, percentage of employees eligible who are enrolled, total premiums for single and family coverage, employee contributions for single and family coverage. Table 3 shows data from five years of MEPS-IC data on average single and family premiums, average single and family employee contribution in dollar amounts and percentage of total premium by firm size. (Establishments are also asked about premiums in consecutive years, deductibles, cost sharing, coinsurance maximums and coverage of specific health benefits but these data items have not

been published.)

Average single premiums were slightly higher for small firms with fewer than 50 employees than for firms overall for 1996-2000 (2.6% to 6.5% higher but only in 3 of the years is the difference significant). Average single premiums were the highest for firms with fewer than 10 employees (7.4% to 13.1% higher, all years significant), followed by firms with 10-24 employees and firms with 1000 or more employees. There was no significant difference between family premiums for small firms and for firms overall. Average single employee contributions were significantly lower in dollar amount for small firms than for firms overall (8.2% to 19.6%) and as a percentage of total premium for the small firms (13.6% to 21.6% lower) but higher for average family employee contributions in dollar amount (7.2% to 17.3%) and in percentage terms (7.8% to 16.0%), although not significantly different in all five years. Average single employee contributions in dollar amount and percentage were lowest for small firms and highest for the largest firms (1000 or more employees). Average family employee contributions in dollar amount and percentage were lowest for the largest firms (1000 or more employees) and highest for firms with 25-99 and 100-999 employees.

B. Premiums by Wages and Union Employees

1. KPMG/Kaiser

Gabel studied the effects of wage distribution on coverage, benefits, cost sharing, costs, and plan offerings using the KPMG/Kaiser 1998 survey of employers (Gabel et al 1999). Monthly premiums increased with percentage of high wage employees. Monthly premiums were generally highest for high wage firms (20% or more of employees earned more than $75,000 per year and fewer than 30% of employees earned less than $20,000 per year). Low wage firms (30% or more of employees earned less than $20,000 per year and 5% or less of employees

earned more than $75,000 per year) had the lowest monthly premiums. Low-wage firms required employees to pay 24% of the monthly premiums for single coverage compared to 21% at high-wage firms. Low-wage firms required employees to pay substantially more, 41% of the monthly premiums for family coverage compared to 27% at high-wage firms. The average deductibles in conventional plans (non-managed care) for single coverage were $293 for low-wage firms and $209 for high-wage firms. In-plan PPO deductibles were $228 in low-wage firms and $150 in high-wage firms. In-plan POS. deductibles were $73 for low-wage firms, more than double the deductibles for high-wage firms.

2. MEPS

MEPS divides firms into those with 50% or more low wage employees (less than $6.50 per hour) and those with less than 50% low wage employees. The firms with more low wage employees had lower single premiums (3.7% to 8.4%) than for firms overall and lower family premiums (3.7% to 12.9%) and higher employer contributions in dollars (3.6% to 19.4% for single and 11.5% to 37.2% for family) as shown in Table 4. There was no consistent pattern for firms with small firms with fewer than 50 employees and large firms with 50 or more employees. MEPS also contains data by firms with and without union employees (see Table 5). Average single premiums were 3.9% to 15.2% higher for firms with union employees. Average single employee dollar contributions were 12.0% to 26.4% lower, family employee dollar contributions were 28.7% to 42.9% lower, single employee contribution percentages were 23.8% to 29.6% lower, and family employee contribution percentages were 31.0% to 42.0% lower for firms with union employees. Average single premiums were lower for larger non-union firms in 1999-2000. Average single employee contributions in dollars and percentages were lower for smaller non-union firms in most years. Average single employee premiums were higher for

small union firms in three years.

C. Comparison of KPMG/Kaiser/HRET and MEPS for 1998-2000

The data on premiums and employee contributions by firm size from these two series of surveys are not always consistent. Both surveys found that single premiums were slightly higher for the small firms (with fewer than 50 employees and especially for the smallest firms with fewer than 10 employees) than for firms overall. Unlike Kaiser/HRET for 1998 and 2000, however, MEPS did not show that family premiums were highest for the smallest size. Instead, in MEPS, the largest firm size (1000 and more employees) had the highest family premiums. Small firms had the lowest single employee contributions (in dollar amount and percentage of premium) in MEPS. This was true for single employee contribution in dollars from Kaiser/HRET in 1999 and 2000 but not in 1998. The firms with fewer than 50 employees had higher family employee contributions in MEPS in all three years and in 1998 for Kaiser/HRET. Premiums were higher for firms with more high wage employees under KPMG/Kaiser and MEPS.

D. Administrative Expenses

Administrative functions for health insurance companies can be divided into four major components: transaction-related, benefits management, selling and marketing, and regulatory/compliance (Thorpe 1992). Transaction-related functions include claims processing and premium collection. Benefits management includes plan design and pricing, providing information to participants through plan booklets and personnel, statistical analyses of data, and quality assurance. Selling and marketing include sales commissions, advertising, and other sales efforts. Regulatory and compliance functions include premium taxes, reserve requirements, and filing federal and state reports. Insurance companies, third party administrators (TPAs), and

HMOs offer these services, bundled or unbundled. Self-insured employers may purchase just claims processing services from an outside vendor and perform many of the benefits management functions in-house. Employers that purchase health insurance may also perform some of the benefits management functions themselves.

Insurers add a margin to premiums of insured plans for profit and risk, i.e., to fund the inevitable losses that incur in some products or in bad years. These margins vary inversely by size of plan, reflecting the greater risk of fluctuations on small groups, volume discounts that reflect the greater purchasing power of large buyers and competition with self-insurance. To some extent, large employers of insured plans also enjoy the advantage of purchasing under an arrangement in which insurers promise to return the excess of premiums collected over claims incurred plus a promised "retention" margin. These arrangements are not available to small employers due to the far greater fluctuations in claim volumes from year to year and the potential for one or two group members to incur very large claims. Competition tends to drive these retention margins to very low levels, restricting the profit margin as well as the provision for funding losses. Other charges by either insurers or TPAs also tend to be substantially lower for larger employer groups. In particular, marketing and benefits management costs are spread over a larger premium volume.

Combining small employers into larger "groups" (e.g., through associations or trusts) only reduces administrative costs if the cost per employer is reduced significantly. For example, if the association (or trust) must market itself to employers, the combined insurer and association marketing costs may be increased rather than reduced. Marketing costs can be reduced if there is a substantial reduction in turnover from employer loyalty to an association. There may be a significant reduction in benefits management if the entrepreneurs who typically own small

businesses can be persuaded to offer one of a few standardized benefit plans and do not rely on the association or insurer to explain benefit practices, functions that are typically absorbed to some extent by the personnel or benefits management in larger firms. The cost of some administrative functions is increased for small firms. For example, the cost to collect premiums that reflect the exact composition of the enrollment each month and the cost of plan booklets, underwriting applications and renewals tend to have economies of scale.

1. Administrative Expenses for Purchased Plans

Insurance companies and HMOs sell insurance policies to small groups through internal sales forces and/or brokers (i.e., independent agents). In either case the primary compensation to the sales personnel is commissions as a percentage of premiums (there are usually other volume-based incentives and rewards). The costs of maintaining dedicated sales offices are part of general administrative overhead expenses. Brokers usually work for several insurers. Captive agents work primarily or exclusively for only one insurer. Commissions are paid every year the premiums are paid but sometimes are lower with renewals after the first year. Insurers also pay general agents about 25% of the agent commissions for managing and recruiting agents. Traditionally, Blue Cross and Blue Shield Plans (BCBS) and HMOs relied on their own sales forces for direct sales. Some state laws may have prohibited them from using independent agents. Until 1995, non-profit insurers could not pay commissions in New York (Best's Review October 1995). However, in order to compete with other health plans, many BCBS plans and HMOs, including nonprofits such as Kaiser and GHI, are now paying competitive broker commissions as well as maintaining their own sales forces.

Brokers are generally used for small group health insurance to provide information and guidance and perform services not easily found elsewhere (Hall 2000). Although web-based

programs can provide initial information, small firms want more details and discussion of the advantages and disadvantages of different health plans. According to a survey of 300 small businesses with 2-50 employees conducted by the National Association of Health Underwriters, 86% thought brokers provided important services and brokers were used by 75% of small businesses with health plans (Advisor Today October 2001). In a confusing world with different kinds of managed care plans and complex small group underwriting, rate setting, renewal rating, guaranteed issue of a specified plan, high risk pools, etc., most small employers appear to need brokers to help them decide on which insurers and health plans to consider. The growth of E-commerce insurance products may be changing the role of brokers. Some insurers and HMOs are selling health plans online without brokers (Managed Care Week 2000). Other insurers and HMOs are selling online but link the employer with brokers and use brokers to complete the sales. The volume of actual on-line sales, however, remains a tiny proportion of total premium volume, perhaps because there are no effective brokers to explain the choices to small employers.

Broker commissions have been a target for cost cutting in health care alliances for small groups. Legislators initially planned to have the Florida Community Health Purchasing Alliances (CHPA) that started in 1993 sell directly to small employers but decided to require the use of brokers (Business Insurance 2001). The Texas Insurance Purchasing Alliance (TIPA) began in 1995 by selling directly to small employers (without brokers and commissions) and then used brokers but limited commissions (Texas Department of Insurance 2001). The North Carolina health insurance purchasing cooperative (Caroliance) also initially considered direct sales but then sold only through independent agents. Median commissions in Caroliance were 5% compared to 8%-10% for small groups elsewhere in the state (Lawlor and Hall 2000). No

override commissions for recruiting and supervising agents were paid to managing general agents, which resulted in their opposition.

The Health Insurance Plan of California (HIPC) began in 1992 by not charging small employers that did not use a broker and listing broker commissions separately on the invoices (Yegian 2000). HIPC (now Pacific Health Advantage) increased its broker fee from 5% to 8% of premiums in 1998 (whether a firm uses a broker or not). HIPC found that the majority of firms voluntarily used a broker and paid the broker fees, anyway. The new policy made it easier for brokers to give quotes and encouraged their participation. In March 2002, differences by group size were instituted. New groups of 15 or more employees were given a 5% discount on premiums while new groups of 5 or fewer are charged 5% more (Pacadvantage May 2002). These discounts recognize the lower average cost to administer the larger small groups and give HIPC a competitive advantage compared to products not offered through HIPC which must offer the same premium rates for all employment groups with fewer than 50 employees.

In the mid to late 1990's, a number of major health insurers reduced broker commissions, sometimes as much as 40%, including Aetna, U.S. Healthcare, Humana, PacifiCare, United HealthCare, and several Blue Cross and Blue Shield plans (Healthcare Business May 2000). In Florida, agent commissions for small groups were slashed from 8% to 1% (Business Insurance 2001). Many health insurers also cut costs by using a smaller number of brokers who write more business and selling health insurance policies on the Internet. However, some insurers have reversed their position on broker commissions. Aetna raised its commissions for small group business from 3% to 5% and 5.5% of premiums in early 2002 and to 7% in at least one state (California) in June 2002.

GAO published a list of state health insurance premium tax rates for health insurers, Blue

Cross and Blue Shield plans, and HMOs (GAO 1996). Premium tax rates ranged from 0% for Utah and Michigan (although in Michigan insurers paid a business tax) to 4.265% in Hawaii. Thirty-four states had premium rates of 2% to 3%. Twenty-four states did not tax Blue Cross and Blue Shield plans. Thirteen states charged health insurers and Blue Cross and Blue Shield plans the same.

GAO studied insurance company administration costs and expenses and concluded that they "typically account for about 20% to 25% of small employers' premiums compared to about 10% of large employers' premiums" (GAO 2001). Insurance agent fees ranged up to 8-10% of premiums for small employers. Many large employers can assume some of the administrative functions such as eligibility determination, enrollment, education of employees, finding suitable health plans, contracting with the insurer and dealing with insurer problems that smaller employers pay insurance companies or brokers to perform. Most large employers also self-insure so they don't pay premium taxes or risk charges. Many administrative expenses such as sales and marketing, contracting, pricing, and billing are largely fixed costs so the larger the group, the lower these expenses are per employee. These figures show a lower differential in administrative costs by firm size compared to data from the late 1980s.

The Congressional Research Service published a table of estimates of insurance company administrative expenses breakdown for conventional funding made available from Hay/Huggins by firm size (CRS 1988). Total administrative expenses ranged from 5.5% of claims (5.2% of premiums) for purchased plans with 10,000 employees and 16% of claims (13.8% of premiums) for plans with 100 to 499 employees to 25% of claims (20% of premiums) for plans with 20-49 employees and 40% of claims (28.6% of premiums) for plans with 1-4 employees. The basis of these estimates, however, was never documented, and was apparently just the "guesstimates" of

an experienced actuary employed by a company offering insurance to different size groups. There are no recent well-documented estimates of administrative expenses of purchased plans by firm size, especially for small groups (Curtis 2001).

There is some data on overall administrative expenses or non-medical expenses for group health insurance but not by firm size. A recent study of Blue Cross and Blue Shield Plans showed that average administrative expenses were 12.4% of total revenues in 2002 with a range of 8.5% for the 25th percentile to 16.9% for the 75th percentile (Sherlock 2002). Data on loss ratios (medical expenses as a percentage of total premiums) is more readily available than administrative expenses. We can calculate non-medical expenses (known as loading in insurance terminology) from the loss ratio that would include the administrative expenses and any profits. Since loss ratios are a function of the premiums earned and claims incurred (as determined for this purpose under state regulations), whether the insurer earned a profit or suffered a loss is not determinable. Consequently, to the extent that the sum of claims incurred and administrative costs exceed the premiums earned, the administrative expenses may exceed the complement of the loss ratio. For example, if the loss ratio was 70% and the administrative expenses 25% of earned premiums, there would be a risk/profit margin of 5%. But if the administrative expenses were 35%, the insurer would have a loss of 5% and no contribution to risk.[1] The loss ratio for group purchased health insurance was 78% to 79% for 1990-95 (Health Insurance Association of America Source Book 2000 data including hospital/medical but not loss of income insurance). Thus, the portion of the premiums available for administrative expenses and profit/risk charges was 21% to 22%. The actual level of administrative expenses or profits

[1] In some states insurers may charge higher premiums than needed for the current year under some types of policies and set up reserves that can be used to fund losses incurred in subsequent years. In such cases states generally permit insurers to include some increases in reserves in the loss ratios that are reported. These increases must be excluded from both premiums earned and claims incurred to determine the loss ratio applicable to the current year.

cannot be calculated from these loss ratios, without knowing the effective average profit margin of the insurers during those years. Total premiums for fully insured group health insurance was $52 billion in 1995, compared to $85 billion for self-insured premiums and $95 billion for HMOs (HIAA 2000).

2. Administrative expenses for self-insured health plans

There are three major sources for administrative expenses for self-insured health plans, although not for smaller firm sizes. Two periodicals publish annual directories of third party administrators TPAs, *Business Insurance* (BI) and *Employee Benefit Plan Review* (EBPR). Mercer/Foster Higgins Survey of Employer-sponsored Health Plans reports administrative expenses for insurance companies, TPAs, and self-administration combined. Also, the functions performed by these three kinds of administrators may differ and not be comparable. (The smallest firm size reported by the Mercer/Foster Higgins employee benefit consultant surveys is 10-499 employees but data was not sufficient for this size for some data elements. Clients of employee benefit consultants tend to be the larger employers.) Neither of the TPA directories is complete. Although being listed in the *Business Insurance* and *Employee Benefit Plan Review* directories provides free advertising, TPAs are not always listed from year to year and differ in the two periodicals. For their 1997 directories, BI listed 100 health TPAs, of which 57 were also listed in EBPR. EBPR listed an additional 60 TPAs not listed in BI. In recent years, the total number of TPAs reporting to BI and EBPR has declined. From 1986 to 1994, there were 223 to 288 TPAs listed.

We estimated average TPA administrative expenses from the 1997 BI and EBPR directories and compared these figures with Mercer Foster/Higgins results. For BI, 161 TPAs reported a weighted average of 5.4% administrative expenses as a percentage of benefits claims.

For the 76 BI TPAs that reported number of covered employees (which is usually less reliable than claims), weighted average administrative expenses per covered employee were $106 per year or about $9 per month. For EBPR, 159 TPAs reported a weighted average of 6.0% administrative expenses as a percentage of benefits claims and $103 or about $9 per month per covered employee. These figures of 5.4% and 6.0% administrative expenses as a percentage of claims are equivalent to 5.1% to 5.7% administrative expenses as a percentage of total premiums.

TPAs may not provide all the administrative functions that insurance companies generally provide. For example, large employers usually maintain their own enrollment files and provide this information to the TPA in a data processing medium, sometimes directly updating the TPA's enrollment files (with the TPA directly accessing the employer's records). Medium size and large employers maintain their own employee benefits departments and can contract with expert benefit consultants directly. Premium taxes and insurer profits are eliminated altogether. TPAs have also enjoyed a cost advantage over insurers in performing the same operations, partly as a result of lower regulatory costs (e.g., avoiding state regulation). TPA business also tends to be more concentrated in particular states, leading to economies of scale in claims processing.

The 1997 Mercer Foster/Higgins Employer-Sponsored Health Plan Survey reported that more than 70% of self-insured traditional (non-managed care) and PPO plans paid a dollar amount per employee per month and that average dollar amount for large employers (500+ employees) was $15 for administration by insurers, TPAs and self-administered plans, $14 for smaller employers (10-499 employees) and $14 overall (Mercer Foster Higgins 1998). The administrative expenses as a percentage of total premiums averaged 4.8% of premiums for

traditional plans and 5.1% of premiums for PPOs. (This is not a direct estimate of administrative expenses compared to premiums in the same health plans since premiums were reported by significantly more health plans than administrative costs.) These figures are equivalent to 5.0% to 5.4% of claims. Thus, the percentage of administrative expenses reported by the TPA directories is fairly close to the Mercer Foster/Higgins survey results although the administrative expenses per covered employee is lower for TPAs ($9 compared to $14-$15 per month).

HIAA reported loss ratios of 90% to 93% for self-insured plans (not including Blue Cross Blue Shield plans), including plans with reinsurance for 1990-95 (HIAA). The equivalent administrative expenses would be 7% to 10% of total premiums (or premium equivalents), or 8% to 11% of total claims.

Most self-insured plans purchase reinsurance to protect against catastrophic fluctuations in claims. The percentage of self-funded firms with reinsurance was 90% for PPOs and 80% for traditional plans (Mercer Foster/Higgins 1999 survey). Employer reinsurance may insure against very high claims for an individual during a calendar year, referred to as "stop loss" insurance, or protect against the aggregate claims for the entire group exceeding a designated percentage of an estimated per capita amount (set forth in the agreement).[2] In either case, the contract is between the employer and the insurer, and at least nominally there is no contract involving the employees or their dependents. Consequently under ERISA, employer reinsurance contracts are not regulated by the states.[3] However, there is little data available on the reinsurance premiums that self-insured plans pay which are part of the total costs of the health plans.

3. Administrative expenses of managed care plans

Traditional fee-for-service insurance is able to separate the costs of health care delivery

[2]In most cases, employer reinsurance contracts are based on the claims paid during a particular period rather than the claims incurred.

from insurance functions (Robinson 1997). However, with managed care, insurers are providing some of the health care delivery functions (utilization review, quality assurance, etc.) and physician groups and hospitals are providing some of the insurance functions (assuming risk through capitation payment, marketing, etc.). HMO administrative expenses can be allocated to the HMO, to physician groups, or to the hospitals. IPAs and PPOs have higher administrative expenses because they conduct utilization review and quality assurance and contract with providers. Managed care plans with smaller networks and fewer products are likely to have lower administrative expenses. Plans with higher consumer cost sharing will have lower medical expenses and lower premiums. Thus, it is difficult to compare the administrative expenses of managed care plans such as HMOs, PPOs, and POS plans with traditional fee-for-service plans.

Interstudy publishes overall HMO administrative expenses as a percentage of total revenues (Interstudy 2001). From 1996-2000, the 50th percentile administrative expense ratio ranged from 13.7% in 2000 to 16.2% in 1996, averaging 14.9% over the five year period. The 25th percentile averaged 11.6% and the 75th percentile averaged 20.8% over the five years. Administrative expenses as a ratio of premiums ranged 2.1% to 13.3% for four Kaiser HMOs, and 9.6% to 37.0% for 20 HMOs around the country (Robinson 1997). There is virtually no information from any source concerning the variation of the administrative expenses and risk/profit margins of managed care organization by the size of the employment groups insured.[4]

4. Health benefits administration by large firms

Large firms have human resource departments that administer employee benefits. Kaiser/HRET surveyed large firms with 200 or more employees in the year 2000 (Kaiser/HRET 2000 Annual Survey) on health benefits administration. It found that 8 FTEs administer human

[3]The contracts do fall under the jurisdiction of the Department of Labor, but there is no active regulation.
[4]In fact the traditional HMO organizations have generally ignored the variation in cost by group size.

resources per 1000 employees (ranging from 5 for jumbo firms with 5000 or more employees to 9 for midsize firms with 200-999 employees), four of the human resource FTEs administer employee benefits (ranging from 1 for jumbo firms to 5 for midsize firms), and that 43% of employee benefits administration was for health benefits. Overall Kaiser/HRET estimates (using assumptions of $40,000 per FTE, fringe benefits as 25% of wages and 60% labor in human resource departments) that administrative costs of health benefits in-house were $250 per covered employee or about 6% of premiums (range of 1% for the largest firms to 8% for the midsize firms). There are no comparable figures for smaller firms.

III. Small Group Health Plans

A. State Regulation

All states regulate small group health plans, usually defined as one or two to fifty employees as a result of the Health Insurance Portability and Accessibility Act (HIPAA)[5], that are purchased from insurers or HMOs under the rationale that regulation is needed to assure availability of health insurance and fair pricing for small groups. State laws require that small group health insurance policies include mandatory contract provisions and cover a number of mandated medical services. Policy forms must typically be approved and rates filed before any are issued (and approved in many states) and many states have strict rules limiting the variation in premium rates charged to small groups. The insurers must pay state assessments or participate directly in any state high risk pools. Under HIPAA, insurers must guarantee issue of policies meeting certain criteria and most states have required that all small group policies be guaranteed issue, i.e., no small group can be denied coverage because of health status or claims experience.

[5]Small group is defined as 1-25 employees in Arkansas, 3-25 employees in Missouri, and 1-100 employees in New Hampshire (GAO 2002).

Encouraged by the National Association of Insurance Commissioners (NAIC), many states adopted legislation that required guaranteed issue and strictly regulated the way insurers set rates for small groups. Twelve states have community or modified community rating which does not allow premiums to vary by health status and only allows differences in premiums for geographic area or family size or in the case of modified community rating, also by age (GAO 2001). In 35 states, there are rating bands that allow premiums to vary by health status and age but the variation is limited (e.g., plus or minus 10% or plus or minus 25% of a projected average rate). In four states there are no rating restrictions although there are insurers that use community rating in three of these states. In most states, the small group market consists of firms with 2-50 employees. In eleven states, small group includes firms of size one (GAO 2002). Some states that do allow firms with just one employee in the small group market are reconsidering because insurers complain that their cost to cover these groups is much higher than for other small groups (Tampa Bay Online May 3, 2002).

Loss ratios (ratio of medical expenses to premiums) are used by state insurance departments to assess solvency and document the need for rate increases. Several states require a minimum level of loss ratio for small group insurance. The minimum loss ratios are 65% for Florida, 50% for Minnesota, 75% for New Jersey, 75% for New York, 60% in Oklahoma, and 73% for West Virginia (Glover et al 2000). New Jersey issues a press release on the amounts of refunds that insurers have to pay to consumers when their loss ratio is less than the minimum standard. The loss ratio has been used to measure administrative waste, quality and extent of health care expenditures. However, the medical loss ratio is only a ratio of two numbers. A high loss ratio can be achieved with higher medical expenditures or lower premiums. In addition, the distinction between medical claims and administrative costs is not always clear cut. For

example, some of the claims functions incurred by medical groups that are paid under capitation arrangements would be classified as administrative expenses if incurred by other insurers. Similarly, some increases in administrative expenses can reduce medical expenses.

Blue Cross and Blue Shield Plans (BCBS) are the predominant insurer of small groups. In a GAO survey of 37 states, 25 states listed a BCBS carrier as the largest carrier in the small group market (GAO 2002). In all except one of the remaining 12 states, a BCBS carrier was among the five largest small group carriers. In 34 states, the median market share of the BCBS carriers was 34% with a range of 3% in Vermont to 89% in North Dakota. In nine states, BCBS had 50% or more of the small group market.

B. HIPAA

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) established minimum federal standards concerning guaranteed issues, guaranteed renewal, and limits on preexisting conditions for small group plans but did not impose any federal standards on premium rates. Under the guaranteed availability provision of HIPAA, if a health insurer offers a small group product, it must offer to any small employer in the state all small group products that the insurer has state approval for sale and is actively marketing. Small group is defined as 2-50 employees (states may define small group as 1-50) and the product must be available for all employers with 2-50 employees. An insurer cannot market just products for 2-25 employees or just products for 26-50 employees.

HCFA issued regulations that insurers cannot pay agents less (commissions, bonuses, or other rewards) for high risk individuals and groups (HCFA Program Memorandum 98-01). HMO Missouri and Healthy Alliance Life Insurance Company were found to be in violation of HIPAA by advertising small group coverage for employers with 2-25 employees but not

employers with 26-50 employees and paying lower commissions for higher risk groups in the year 2000 (HCFA 2002). Commissions ranged from 0.3% to 7.0% for the high risk groups and 0.5% to 10.0% for the groups eligible for preferred rates. A number of state insurance departments have explicitly prohibited insurers from paying lower commissions for enrolling the high risk groups and the smallest groups (e.g, Illinois Company Bulletin #97-4 and #2000-04, Texas Bulletin B-0046-98 of June 1998, Florida Bulletin 98-005 effective September 1998, Arizona Circular Letter 1998-10, Nevada Bulletin 01-008, Utah Rule R590-207 effective September 2001, Maryland HB 85 effective June 2002).

C. Health Purchasing Alliances

Twenty-one states had public and/or private voluntary health purchasing alliances to help small businesses purchase health insurance in 2001 (Blue Cross and Blue Shield Association 2001). In six states, any size group can participate. Alliances may negotiate discounts and require standard benefit packages. Long and Marquis used the 1993 and 1997 RWJ employer surveys to study small group purchasing alliances in three states (California, Connecticut, and Florida) and found that premiums were lower in the first two states in the first few years but did not remain lower (Long and Marquis 2001). The percentage of small firms offering insurance did not change significantly and was reduced in California and Connecticut. Administrative costs were not reduced. Some alliances have been discontinued. Texas TIPA disbanded in 1999. Florida CHPA and Caroliance disbanded in 2000. These alliances were unable to attract enough consumers and insurers to obtain economies of scale (Wicks and Hall 2000). Health purchasing alliances have not grown or maintained enrollment as many had expected. The primary problem, however, is that the purchasing alliances do not eliminate the need for substantial administrative functions or provide them at a lower enough cost to justify their own operating costs. As long as

individual firms can choose to enroll and disenroll, the purchasing alliance is faced with all of the same costs as individual insurers. However, health alliances provide consumers with information on health plan premiums and benefits and may serve as a competitive force in the small group market.

D. Association Health Plans

Trade, industry and professional associations sponsor health plans for their member organizations to obtain some of the economies of scale and bargaining power that large firms have. However, like the health alliances, members of the associations can choose to enroll and disenroll from the health plans.

There have been Congressional bills to exempt association health plans and HealthMarts (which would be open to all small businesses in a geographic area) from rate regulation and mandated benefits by states. The House passed a bill on association health plans as part of the Bipartisan Patients' Protection Act of 2001 but the Senate did not pass a corresponding bill or any other legislation concerning association health plans. Associations offering health insurance plans would have several advantages over group insurance plans available in many states:

- The association health plan (AHPs) must follow the premium rating laws of the state of domicile.
- AHPs could only be offered by bona fide associations formed for business purposes other than to offer insurance existing for at least three years and self-insured AHPs could not be offered in ways that restricted coverage to industries and businesses that employ more healthy work forces.
- AHPs would not have to offer state mandated benefits.
- Regulation and enforcement would be through the Department of Labor (DOL).

- AHPs would be required to maintain reserves for unearned contributions, for benefit liabilities (incurred and future), for administrative costs, for obligations of the plan, and for margin of error. A qualified actuary must determine reserve levels for claims. In addition to reserves for claims, the bill requires surplus reserve of $500,000 to $2,000,000.
- Self-insured AHPs must establish premium rates that are actuarially adequate to cover claims and to maintain required reserves. A statement of actuarial opinion must be provided to DOL as part of the certification process.
- Self-insured AHPs would be required to pay assessments to a DOL fund prior to certification and annually thereafter ($5000 and supplemental payment if needed) into the fund. The fund would be used to pay premiums for stop loss and/or indemnification insurance if an AHP cannot pay.
- AHP coverage would not be subject to state premium taxes or other forms of state taxation, but would instead pay a lower assessment intended to cover the cost of DOL regulatory activities.

Under this legislation, many associations would be able to obtain health insurance for small employer members at significantly lower premium rates from AHPs. The legislation would free small employers who offer health insurance from a number of forms of direct and indirect taxation by the states. For example, although state premium taxes are nominally intended to cover the cost to the states to regulate insurance, in practice they are predominantly a way of raising revenues for the states that is used for other purposes.

AHPs could also offer small employers health insurance that did not involve indirect subsidies to higher cost small employers, especially those involved in requiring guaranteed issue

and the same premium rates for very small "baby" groups (e.g. with 1-4 employees), which cost much more to insure due to the potential for anti-selection,[6] fraud and abuse and disproportionate[7] administrative expenses.[8] Although only bona fide associations formed for other business purposes (i.e. not formed as a vehicle to offer insurance) and existing for at least three years could offer AHPs, and self-insured AHPs could not be offered in ways that restricted coverage to industries and businesses that employ more healthy work forces, insurers of AHPs could offer lower rates to those associations that have lower cost groups for other reasons, e.g. by avoiding associations that have substantial numbers of very small groups.[9] Many associations would also be in a position to police more effectively requirements to cover all and only bona fide employees, avoid bogus employment groups, avoid offering insurance to groups that seek insurance only to cover individuals with existing health problems and other sources of abuse that are encouraged by many state insurance laws.

Other advantages accrue from avoiding certain state regulations. Although the association health plan (AHPs) must follow the premium rating of the state of domicile, the pool can be limited to association members and would have to comply with only one state's rules. Thus AHPs located in states with the less stringent state laws could offer insurance to the lower cost groups that are now forced to subsidize higher cost groups in those states that require

[6] The ratio of benefits to premiums to enroll for health insurance to cover the predictable expenses for a health condition diagnosed for a group member is inversely proportional to the size of the group. Very small entrepreneurs can obviously profit at the expense of the insurance pool when a family member becomes sick and are likely to make the same "investment" for a key employee.

[7] The cost to insurers to determine participation rates and whether employees are bona fide is a fixed cost per employer that tends to be higher for the smallest groups.

[8] Such subsidies represent indirect taxation in the sense that the larger small employers are forced to pay a higher premium which is then spent reducing the premium rates and guaranteeing issue for the baby groups compared to self supporting rates (if self supporting rates are even feasible with guaranteed issue). Subsidizing lower rates and guaranteeing issue may constitute a worthy public purpose, but it is not clear that the larger small groups should have the tax burden to pay for these subsidies, rather than some broader tax base.

[9] It is also far from clear how the provisions relating to the requirement that the AHP must cover a broad cross-section of trades and businesses or industries could be effectively enforced, or that DOL will have the means to do so.

community rating or narrow rate "bands". Insurers of AHPs could also insist that a high proportion of the total association membership purchase health insurance through the AHP, which would provide a strong incentive for the association to meet the target proportion. AHPs would be freed from state requirements to cover designated practitioners and other mandated services.

The House legislation, however, would also permit some of the abuses of the insurance principle that led states to adopt the rate reform legislation in the early 1990's. Some states still permit insurers to use forms of durational tier rating based on claims experience or "reunderwriting", the practice of processing claims information in a manner similar to the initial underwriting process, typically using diagnosis-based or other risk adjustment to determine like future claims experience and appropriate re-rating action. The association's insurer could offer very low rates as long as all of a group's members are in good health, but increase the premium to reflect the full anticipated cost when one or more group members develop expensive health conditions. AHPs would be mainly regulated by DOL which does not have the resources and experience of state insurance departments.

The Congressional Budget Office estimated that 4.6 million people would enroll in the new plans but 4.3 million of these individuals would have already been insured and only 330,000 would have been previously uninsured (CBO 2000, Baumgardner and Hagen 2001). CBO also estimated that premiums in the new plans would be about 13% lower than under current law but premiums for small firms not enrolling in the new plans would increase by 2%.

The Bush Administration, the Chamber of Commerce, the National Federation of Independent Business and other organizations support legislation to permit associations to offer health plans that are exempt from state regulation on the grounds that such legislation would

provide more competition and help small firms obtain health insurance (CongressDaily September 2002, Business Insurance January 2000, CongressDaily May 2002). It was estimated that state mandates accounted for 5% to 21% of health insurance claims and up to 18% of small businesses without health coverage would buy health insurance if there were no state mandated benefits (Jensen and Morrisey 1999).

The National Association of Insurance Commissioners, the National Governors' Association, and the National Conference of Legislators oppose association health plans that are exempt from state regulation because they would "threaten the stability of the small group market and provide inadequate benefits and insufficient protection to consumers" (Insurance Advocate 2001). According to their analysis, small firms with healthier employees would enroll in the new association health plans, increasing premiums for the firms left in the small group insurance market. Some of the proposed association health plans would be allowed to self-insure but with low federal solvency requirements instead of stricter state solvency requirements.

From an objective stand-point, AHPs are likely to lead to moderately lower insurance premiums from a combination of lower direct and indirect taxes, avoiding anti-selection and other cross subsidies, avoiding some mandated benefits and avoiding the cost to comply with multiple state regulations.

E. Basic Health Plans

Many states have passed legislation permitting insurance companies to exclude mandated services for some health plans. The basic health plans (also referred to as bare bones or scaled-back benefit packages) may also limit hospital stays and doctor visits and require large deductibles and coinsurance. These basic health plans have not been popular. In the late 1990's,

few basic plans sold, with annual totals of fewer than 100 in some states and less than 1% of premiums in another state (GAO 2001). Small employers seem to want comprehensive benefits similar to larger employers. Also, brokers may not want to sell basic plans because the premiums and broker commissions are lower. The primary problem, may be that the basic health plans offered in most states with basic plans approach are guaranteed issue and operate within strict restrictions on rate variations while competing with underwritten plans for which insurers are free to raise rates more on groups for which the projected future claims are higher. Since both original underwriting and renewal rating techniques can be used to keep rates substantially lower for groups without existing expensive medical conditions, the rates for these regulated policies tend to be so high that these policies function essentially as a high risk pool for otherwise uninsurable groups.

F. Cost sharing

There has been a very recent trend towards insurers offering significant cost sharing increases in response to large increases in health care costs. Some PPOs in California are now offering plans with $25 and $45 copayments, $1000 deductible with no coverage for office visits, and $2500 deductible with 25% coinsurance (Tollen and Crane 2002). In contrast to indemnity insurance with deductibles and coinsurance, HMOs traditionally had no deductible and imposed small copayments for office visits and prescription drugs. Kaiser offered an HMO plan with $500 inpatient hospital copayment and increased office visit copayments to $30 for the first time in California for small groups for the year 2002. Some HMOs now are adding more cost sharing products with copayments increasing from $5 to $10 or $15 or more and deductibles and coinsurance for inpatient stays (Robinson 2002). Higher deductibles and coinsurance also reduce premiums through reduced utilization. The Hay Group (an actuarial firm) uses the

default assumptions that the utilization of hospital services is reduced so that expenditures will fall by 30% of the increase in cost sharing. Similarly, expenditures for prescription drugs are reduced by 100% of the increase in cost sharing and that for other services is reduced by 70% (Lee and Tollen 2002).

G. Single Plan Replacement

Comprehensive plans with low deductibles and coinsurance and few limits on coverage can result in adverse selection with a disproportionate number of higher utilizers purchasing them and raising the costs per enrollee. A number of insurance companies are developing a single plan replacement for small employers to provide a range of policies but through one insurer. This helps protect the insurers from adverse selection. The insurer can even cross subsidize the premiums by charging less for the comprehensive plans (Tollen and Crane 2002). Less comprehensive plans and single plan replacement may become more prevalent among small employers as health care premium increases remain in the double digits.

IV. Study of Administrative Expenses of Small Group Health Plans

A. West Virginia and Colorado Rate Filings

A few states require insurance companies to provide data on administrative expenses as a percentage of premiums for small group health plans. Washington State and Oregon require this data but it is considered proprietary data and not available to the public. West Virginia (small group is 2-50 employees) and Colorado (small group is 1-50 employees) require data on administrative expenses as a percentage of premiums, total premiums, and total incurred medical benefits for small group health plans on the rate filings and make these available to the public. We were able to obtain rate filings for four insurance companies in West Virginia but rate filings

for 10 other insurance companies were not available in the current files. An official in the West Virginia insurance department explained that insurers can just file an update of the trend factor rather than a complete rate filing abstract. West Virginia requires small group insurers to maintain a 73% loss ratio on renewals.

The following table summarized the administrative expenses from West Virginia and Colorado by type of administrative expenses as a percentage of premiums:

	General Administrative	Commissions	Taxes	Profit/Contingency Margin
West Virginia	11.0%	3.7%	3.1%	3.8%
Colorado	10.3%	10.8%	2.4%	4.9%

For the four insurers selling small group policies in West Virginia for which we could obtain rate filings, total administrative expenses as a percentage of premiums averaged 25.1%, ranging from 20.0% to 29.8%. General administration averaged 11.0%, ranging from 9.8% to 12.3%. Commissions averaged 3.7%, ranging from 1.6% to 4.8%. One insurer listed profit and contingency together as 2.0%. Three insurers listed separate profit margins of 3.5% to 5.7%. Details are shown in Exhibit I.

We were able to obtain the rate filings of 15 insurance companies for their small group policies sold in Colorado, mostly for the year 2001 but a few for the year 1999, 2000 and one filing for 2002, for a total of 18 filings (three insurance companies had two years of rate filings available). Administrative expenses averaged a total of 27.4% of premiums, with 10.3% average for general administration, 10.8% for commissions, 2.2% to 3.2% for premium taxes, licenses, and fees, 1.9% offset for investment income, and 4.9% for profit and contingency. General administration plus commissions averaged 21.3%. Total non-medical expenses ranged from 20.7% to 38.0%. General administration ranged from 8.8% to 13.5% while commissions

ranged from a low of 4.0% to a high of 21.0%. Some commission percentages were lower than general administration but some were about the same or higher. Some insurers had a category of premium taxes while others had a category of taxes, license, and fees. Those insurers listing more than 2.0% for premium taxes are likely to be including licenses and fees. Profit and contingency ranged from 3.0% to 7.9%. Details are shown in Exhibit II.

Small group health plans have higher administrative expenses than larger firms. From the rate filings in West Virginia and Colorado, we found that average administrative expenses as a percentage of premiums of small group plans were 25% to 27%, which is equivalent to 33% to 37% administrative expenses when averaged as a percentage of claims. From the BI, EBPR, Mercer/Foster Higgins, and HIAA data, we found that self-insured firms pay 5% to 11% administrative expenses as a percentage of claims. Larger purchased plans would have administrative expenses lower than small group plans but higher than self-insured plans because they pay premium taxes like small groups but would have lower general administrative expenses and profit charges than small groups. Thus, for the same claims per covered employee or enrollee, small group plans pay up to 20% to 30% in total premiums more than larger health plans. Administrative expenses for small group plans are 3 to 7 times higher as a percentage of claims.

Larger firms spend 1% to 8% of total health care costs on in-house administration (Kaiser/HRET 2000 Annual Survey). If we add these in-house expense to the self-insured plans and assume that small firms spend little or no time in-house on administration of health plans, then small firms would pay 33% to 37% of claims compared to 6% to 19% for larger self-insured firms or 12% to 29% more in total health care costs including in-house administration.

B. Broker Commissions on the Web

An Internet search (of health insurance and agent or broker commissions on the Google search engine) found a number of websites with broker commissions for health plans (mostly small group plans with a few individual and large group for comparison purposes). These websites were sponsored by insurance companies, HMOs, brokers, and state insurance departments. Several state websites contained market or financial conduct examinations that included broker commissions, although these were in effect in 1996-2000 and may have changed. Small group broker commissions for medical plans ranged from a flat rate of 3% to 10% for 19 insurers and HMOs, with an average of 5.5%. For broker commissions that varied by size of small group, commissions ranged from 1% to 10% with an average of 3.3% for the lower bound to 7.4% for the higher bound for 30 insurers. Dental plan commissions were higher than for medical plans, averaging 9.6%. Exhibit III shows the commissions, arranged by state.

C. Other Information on Small Group Health Plans

We spoke to several state insurance department officials and insurance executives about small group health insurance and obtained reports from state insurance departments. There has been substantial consolidation due to insurers leaving the small group market. For example, several of the large health insurers, including CIGNA and Mutual of Omaha, no longer sell small group plans. State legislation adopted in the early 1990's in response to the threat of federal national health insurance and renewal rating practices of many insurers in the small group market, and state laws implementing HIPAA have made it very difficult for most insurers without large, concentrated market shares to operate profitably. States that require guaranteed issue and narrow rate bands preclude use of the underwriting and renewal rating practices on which these insurers depended. Higher loss ratio requirements and changes in how they were

enforced have forced insurers to reduce marketing costs or leave the market. The need for a large concentrated market share to obtain competitive discounts from providers has reinforced this trend to concentration. As the insurers that could not operate at a profit left the market, the average administrative costs of those remaining has fallen as a percentage of premiums and claims incurred, and the remaining insurers have enjoyed higher market shares and the resulting economies of scale. More concentrated market shares have produced increased opportunities for economies of scale, especially the computerization of most enrollment and claims related functions. Where markets have become highly concentrated, the insurers have also found that they can cut commissions and other marketing costs due to reduced competition.[10] In the states with narrow rate bands and limits on annual rate increases, the average administrative costs (especially marketing) have been further reduced by lower turnover, since renewal marketing costs are usually far below those incurred in the initial year.

Another influence has been the persistently increasing level of premiums. For one thing, administrative costs as a percentage of premiums or claims incurred fall as the level of average claims increases, since most administrative costs increase over time at the general rate of inflation, not the higher rate of the cost per capita of medical care. These trends have been reinforced by the higher rate of increase in premium rates for small group policies than for all employment groups. HIPAA requirements that effectively force insurers to charge the same

[10]Competitive pressures in the markets for small group insurance and individual insurance reflect the two tiered nature of these markets. (1) Brokers sell to small firms and individuals and (2) insurers sell to the brokers. Brokers prefer the insurers that offer higher commissions and other sales incentives. In a market with a large number of insurers offering similar products, the brokers are in a position to limit the choices offered to the small firms and individuals to those paying a competitive commission. Thus increased competition among insurers may drive commissions up rather than down. Dedicated agents can exert pressure on their insurers to match the level of income of brokers (or go to work for the brokers). Direct sellers can avoid some of these pressures, but the demand by individuals and employers for a personal source of information to simplify their decisions has driven most insurers to pay commissions, despite strong ideological opposition in the managements and directors of service places and traditional prepaid group practice plans.

rates to all groups with fewer than 51 employees despite major differences in administrative costs per capita and the potential for fraud in the smallest groups has led to the flight to self insurance (with low stop loss levels) for most of the larger of these employers with low cost groups, leaving only those with higher cost groups in the pool of purchased insurance.

Commission rates for small groups have been strongly impacted by the combination of different state and federal regulations affecting small groups with under 50 employees:

- State laws (and federal through HIPAA) mandating guaranteed issue
- State loss ratio requirements
- State rate setting requirements
- State rate increase limitations.

Guaranteed issue has meant that the small group underwriting function has been altered in many states. In some states that require community rating, or offer non-discretionary high risk reinsurance, the underwriting function has been virtually eliminated. In other states it has been reduced to determining which cases should be placed in the state high risk pool, and/or whether to charge the minimum or maximum tier rates permitted by state rate bands. State loss ratio requirements have forced insurers to limit commissions in order to stay within the permitted expense allocations. State loss ratio requirements and the expense of altering operations to accommodate the different state laws and regulations have driven many insurers with relatively small market shares in any state to withdraw from the market.[11] The resulting concentration has permitted the remaining insurers to reduce commissions and sales support expenses substantially, since small employers have fewer choices. Premium rate bands and rate increase restrictions have reduced the turnover rates among small groups, reducing underwriting and marketing costs

[11] In view of guaranteed renewal provisions in many contracts, some insurers may have dwindling blocks of business in force for some years after the decision to withdraw.

further.

In early 2002, Colorado had 44 insurance companies with small group policies but only 24 insurance companies are currently marketing to new small firms and several provided notice of withdrawal (State of Colorado April 30, 2002). Colorado includes firms with only one employee in their small group market with modified community rating (allowing rate variation by age and geographic area but not health status) so it may be experiencing more insurer discontent than other states. The state insurance department also feels that healthier small groups are purchasing individual policies or self-insuring leading to higher risks in the small group market. Sixty percent of the small group market were enrolled in HMOs and 37% were enrolled in PPOs with only 3% in traditional indemnity plans which cannot obtain the provider discounts and utilization controls that the managed care plans can.

V. Study of Actuarial Value

A. Actuarial Value

The actuarial value is the measure of the value of the benefit package that is independent of the premium rate. Actuarial values are a way of comparing health plans with differences in deductibles, coinsurance, coinsurance maximum, benefit limitations and covered services and summarizing all of the these factors in one variable. For the same premium rate, a higher actuarial value would mean that the purchaser obtained more benefits per dollar spent.

The actuarial value of a health insurance plan measures how much of the health expenditures of a standard employed population would be paid by that health plan. Health plans that cover all major types of medical services (inpatient hospital, outpatient hospital, physician, other professionals, dental, vision, mental health, and medical supplies) with lower deductibles

and patient cost sharing (copayments and coinsurance and out of pocket maximums) would pay the highest percentage of health costs. Actuarial values relate to the generosity of the medical services received, without considering the quality of the care or other reasons for price variations among providers. For example, the actuarial value of an office visit is assessed to be the same regardless of the actual charge of the physician. Limitations on where the service can be obtained are also ignored.

HMOs do not pay for services out of network and PPOs and POS plans have different cost sharing (and sometimes different covered services) in and out of network. The amount of services that would be expected to be obtained in and out of network will vary by type of plan. The actuarial values are estimated by assessing the medical services covered and any limits on those that are paid for and the patient cost sharing provisions (i.e. deductibles, coinsurance, copayments, etc.). The cost sharing is applied to covered services provided to a standard population person by person and aggregated to determine how much should be paid by the enrollee in cost sharing for covered services, how much should be paid by the health plan, and how much was not covered at all by the health plan (and paid by the enrollee or not collected by the provider). It is essential to use a database with utilization and expenditures consistent for persons nationwide with employer-sponsored health insurance in order to calculate actuarial values that represent national averages.

B. Hypothesis

Employers purchase health plans or self-insure health benefits on behalf of their employees. They have many choices as to what type of health plan (HMO, PPO/POS, or FFS), the scope of services covered and cost sharing (deductibles, copayments, and coinsurance) to offer. Because of the need for administrative functions larger groups don't need (e.g., marketing,

underwriting, individual enrollment), the absence of economies of scale, instability, turnover, and lower bargaining power, small employers have to pay higher administrative expenses than large employers for the same benefits. Many studies, however, have shown that the health insurance premiums for small employers and large employers are fairly similar with small employers paying slightly higher premiums for single coverage. This relatively small difference in premium rates combined with the substantially higher administrative expenses documented above suggest that the actuarial value of the benefit packages of small employers may be significantly lower than those for larger employers.

More generally, our hypothesis is that covered services and cost sharing of health plans is related to characteristics of the decision maker (i.e., the employer) such as firm size (total number of employees), type of industry, wage levels, whether there are union employees, and complexity of health plan administration. This can be characterized as follows:

(1) Actuarial Value = f(firm size, industry, wage, unionization, health plan complexity)

In words, the actuarial value is a function of several independent variables, including the variable in which we are most interested, the size of the employment group. We hypothesize that actuarial value increases with firm size. Type of industry is included because certain types of businesses, such as agriculture and retail trade, are known to be less likely to offer health plans. We may thus hypothesize that the plans offered by these firms in these industries that do offer plans will be less generous, i.e., have lower actuarial value. Similarly there are a number of studies showing that higher wage employees and union members are more likely to enjoy better health insurance coverage. The final variable in (1) is the complexity of health plan administration, which by increasing administrative costs may also squeeze the amount of premium available for benefits and reduce the average actuarial value.

C. 1997 Robert Wood Johnson Survey of Employers

The 1997 Robert Wood Johnson Survey of Employers interviewed 21,047 out of 54,690 sampled private firms of all sizes (with and without health plans). One third of the private firms were found ineligible due to self-employed individuals with no other employees, or firms that were not locatable or were government units instead of private firms. Overall response rate was 58% for private employers. There were 11,542 completed interviews with private employers with health plans.

The Survey of Employers is part of the RWJ health surveys that are conducted to provide analyses on a community, state, and national basis. However, the Survey of Employers is not conducted each year. The 1997 survey is the only RWJ survey of employers that has been conducted to date. Its methodology is similar to the 1993 National Employer Health Insurance Survey sponsored by the National Center for Health Care Statistics. RWJ also commissioned surveys of employers in ten states in 1993.

Public use files are available from the Survey of Employers on cost sharing, premiums, and actuarial value of the health plans. Health plans are divided into general medical plans or single service plans (dental, vision, prescription drug, or mental health). Survey participants were asked whether their general medical plans were HMO, PPO, POS, or FFS (self-reported). They were also asked questions about whether an enrollee pays full cost if they go out of network (HMO), whether there is some out of network coverage (PPO/POS), and whether there was no network or list restriction (FFS). The answers to these questions provide an imputed categorization of the type of general medical health plan. Since survey participants may not be certain of the definitions of the types of health plans, the imputed categorization based on the answers of how the health plan works are more likely to be reliable and we use the imputed type

of health plan in this study.

1. Actuarial Value

Actuarial Research Corporation calculated the actuarial value of health insurance plans responding to the 1997 Robert Wood Johnson Survey and these actuarial values are made available on public use tapes. Actuarial values describe the richness of a plan on a scale of 0 to 1. An actuarial value of 0.75 would mean than if everyone in a reference group consisting of a sample of everyone in the U.S. with employer-sponsored insurance were covered by the plan, then on average that plan paid 75% of total health expenditures. The cost sharing, covered services and benefit limits of a health plan are valued against a uniform set of criteria. For the 1997 RWJ, the value of benefits of health insurance plans are valued against detailed expenditures for persons by type of service with employer-sponsored insurance based on 1987 National Medical Expenditure Survey (NMES) and consistent with the HCFA National Health Accounts for 1997.

These actuarial values incorporate the impact of the covered services and cost sharing that are included in the RWJ survey questionnaire. The survey asked whether the health insurance plans covered six main types of services: physician, inpatient hospital, prescription drugs, mental health, dental and vision. Health plans were asked for deductibles and cost sharing (copayments in dollar terms or coinsurance as a percentage) for in plan use and out of plan use. If the health plan had different cost sharing for mental health or prescription drugs, this information was collected and used in the calculation of actuarial values. The survey also asked for whether there was a maximum out of pocket expense and the dollar amount.

The RWJ survey did not collect data on separate cost sharing for inpatient hospital and

benefit maximums for services such as mental health and prescription drugs. Cost sharing is collected for dental and vision plans if they are separate single service plans but not if they are part of the general medical plan but have different cost sharing and limits. Consequently, the actuarial values do not take these health plan provisions if not included in RWJ into account

The RWJ survey also did not collect data on the recognized or "allowable" charges to which cost sharing provisions are applied. For example, a physician may charge a fee of $100 for an office visit, for which the insurer has a fee schedule amount of $60 for the CPT code in question in the setting (and perhaps physician specialty) and area where the service was performed. If there is also a copayment of $10 that the physician can collect from the patient, the insurer will pay the provider (if assigned or under an HMO or PPO contract, otherwise reimburse the patient) $50. If there is no contract between the insurer and provider limiting the provider's charge to the fee schedule, the physician is free to collect the remaining $40 of the charge from the patient (sometimes referred to as "balance billing"). Allowable charges are usually based on fee schedules maintained by the insurer or TPA, but may also be a percentage of Medicare allowable charges, or a percentage of billed charges. Participating providers (under Blue Cross and Blue Shield Plans, PPOs and POS plans) agree to accept the allowable charge and not bill the patient for any excess of their usual charge over the amount allowed. Otherwise patients are responsible for paying the difference between billed and allowable charges which is usually the case under FFS plans or if they use out-of-network services in a PPO or POS. Since detailed information from each plan is not available (and would have been very difficult to collect and analyze), general assumptions were made about the level of allowable charges and out-of-network services in calculating the actuarial values.

2. Type of industry

There are some limitations on the RWJ SIC codes. The public use RWJ tapes do not include SIC code for employers with more than 5000 employees in one location (in order to maintain privacy) so these employers are a separate industry category. SIC code may not be a valid measure for employers with divisions or subsidiaries in more than one industry category.

D. Regression Model

We tested the following regression specification using the data available from the RWJ survey:

(2) ACT = intercept + B1*SIZE + B2*SIC + B3*WAGE + B4*UNION + B5*NPLAN + error

Where:

ACT = log of actuarial value of health plan (0 to 100) estimating how much of total health expenditures are paid by health plan

SIZE = total employees in firm

SIC = SIC industry code except if more than 5000 employees at one location

WAGE = percentage of employees with wages > $15 per hour

UNION = 1 if any union employees

NPLAN = number of general medical plans

Following actuarial tradition in which premium rates are found by multiplying factors that adjust for the effect of wage levels, union employees, etc. and the multiplicative impact of administration on premium rates, we specify the log of the actuarial value as the dependent variable. The actuarial value of a health insurance plan measures how much of the health expenditures of a standard employed population would be paid by that health plan. It is essential to use a database with utilization and expenditures that is consistent nationwide with employer-sponsored health insurance in order to calculate actuarial values that represent national averages.

For this purpose, the actuarial values attached to the RWJ survey are appropriate. These were calculated from all persons with employer-sponsored health insurance in the NMES, which is based on a nationwide statistical sample of the U.S. population.

Type of industry is designated by SIC code. The RWJ public use tapes have a separate SIC code for all firms with more than 5000 employees and only one SIC code per employer. We restrict the study to private employers. There are relatively few small public employers and many public employers may have access to other state and local health insurance programs so they don't have the same kinds of health plan choices as private employers have.

The other variables in the model are wage levels, any union employees, and the complexity of health plan administration. We use the RWJ variables of the percentage of employees with wages higher than $15 per hour, whether the firm had any union employees and the number of plans as a proxy for complexity of health plan administration. The number of plans has been included as a proxy for the complexity of the administration, not only because of duplication of functions and loss of marketing clout but because the plans offered are more likely to include HMOs and PPOs, which are more expensive to administer, and for which a higher proportion of the total administrative costs are included in the premium rates. With the increase in the proportions of small employers that offer only an HMO or PPO, however, this proxy may not work particularly well.

In formulating this regression model, however, we must raise some caveats as to its validity when tested against the RWJ data. The health plan information available from RWJ is somewhat limited which may affect the completeness and accuracy of the actuarial values. Type of industry, wage levels, and number of health plans as a proxy for complexity that are the variables available in RWJ may not provide enough detail.

E. Results

Exhibit IV shows the regression results.[12] Since the RWJ public use tape does not contain the variances, we ran a simplified regression with plan data not weighted by sampling weights. The variables found significant and with a positive correlation with actuarial value at the 95% level were

- having union employees
- firm size 200-999
- firm size 1000 and more
- percent of employees earning $15 or more per hour

The variables found significant and with a negative correlation with actuarial value were:

- the construction SIC
- firm size 1-9
- firm size 10-25
- firm size 51-199

These variables have the expected positive or negative correlation with actuarial value. Thus, the largest firms, firms with union employees and firms with higher percentage of workers with high wages had more generous health plans while the smallest firms and construction firms had less generous health plans. Overall, however, the regression model explained only a small proportion of the variation in actuarial value.

Exhibit V and VI show the weighted averages for employers offering health insurance by firm size.[13] Whether the firm had union employees and the percentage of union employees

[12] The regression model is designed to show what variables are associated with variation in actuarial value but not necessarily that there are large variations in actuarial value.

[13]The RWJ public use tape does not include information on standard errors so we are not able to calculate whether the weighted averages are significantly different from total.

increased with firm size. There were no clear patterns of percentage of employees with wages lower than $5 or $15 or greater per hour by firm size. Deductibles were highest for the smallest firms 1-9 and 10-25 but then increased by size. Copayments and coinsurance rates generally increased with employer size. Premiums did not vary by much except for family premiums for the largest firm size. Employer share for single coverage decreased with firm size from 91% to 83%, except for the largest firms. Employer share for family coverage decreased from 78% for 1-9 to 62% for 26-50 but then increased gradually for larger firms.

Actuarial values of health plans did increase by firm size, but only gradually from 78% for the smallest firm size (1-9 employees) to 83% for firms with total employees of 1000 and more. The same pattern of gradually increasing actuarial value held for HMOs, PPO/POS and FFS plans. HMOs had the lowest actuarial value and FFS plans had the highest actuarial values but the differences were small, especially for firms with 50 or fewer employees. HMOs had the lowest deductibles, followed by PPO/PPOs and FFS. Deductibles decreased by firm size except for PPO/POS plans of firms with 200 or more employees and FFS plans of firms with more than 1000 employees. HMOs had the lowest copayments and PPO/PPOs had the highest coinsurance rates.

F. Discussion

We will compare the 1997 Robert Wood Johnson survey data with the 1997 MEPS since they are both large surveys of establishments. The RWJ premiums showed less variation in premiums by firm size while the MEPS showed that single premiums in the smallest firms with 3-9 employees were slightly but significantly higher (8%) than overall premiums. RWJ family premiums were the highest for the largest firms while MEPS showed no significant difference from overall premiums for the largest firms. Employer family contribution was lower for RWJ

(69%) than MEPS (75%).

There have been a few studies of the relationship between firm or employee characteristics and the offering and richness of health plans. Firm size was found to be the most important factor affecting whether a firm had a health plan using data from the 1991 SBA Retirement Plan Survey that used Dun & Bradstreet to sample firms (Lichtenstein 1998). The 1993 RWJ Survey data from 10 states was used to study breadth of plan offerings by number and type (HMO, PPO/POS, and FFS) by Moran et al (2001). More diversity of employees by age and income and size (firm and firm) was associated with more breadth of plan offerings.

Bundorf used the 1993 RWJ Survey to study generosity of a firm's health plans (Bundorf 2002). The actuarial value of health plans from 1987 National Medical Expenditure Survey calculated by Actuarial Research Corp. was used to calculate actuarial values for the health plans in the 1993 RWJ Survey and weighted by plan enrollment. The smallest firms (1-9 employees) had less generous health plans. Larger firms (50-99, 100-249, and 250+ employees), for profit firms and firms with a higher proportion of workers in higher annual wage categories and a higher proportion of full-time employees were likely to have more generous health plans. Health risk measured by expected health costs based on age and sex of employees was negatively correlated with average plan generosity while the variation in health risk measured by the standard deviation of these expected health costs was positively associated. However, the significant variables had small effects on average plan generosity and the explanatory power was low (R^2 was 0.059).

Actuarial value in the Bundorf study and our study increased but only slightly with firm size. We may not be capturing all of the effects of health plan features. In calculating actuarial values, assumptions were made about the effects of cost sharing and covered services that may

not be similar to the calculations of premiums by the different insurance companies. Benefit factors set by actuaries to estimate the effects of changes in cost sharing may be based on national data and applied uniformly to low and high risk groups or based on claims experience which may be dominated by health status and adverse selection (Hall 2002). The effect of health plan features not included in the RWJ surveys could not be included in the actuarial value. The actuarial value also does not measure the value or preference to firms or enrollees.

Small firms purchase slightly less generous benefits but at similar premiums to all firms. This may indicate that the preferences of small firms for generosity of health benefits are not very different from other firms. We had expected to find that small firms purchase much less generous health plans, given that premiums did not vary much by firm size in RWJ and the higher administrative expenses of small firms (documented in Section IV).

There are possible explanations for similar premiums for small and large firms. The 1997 MEPS showed that only 40% of firms with fewer than 50 employees offered a health plan. Premiums for small firms may be lower because small firms with health plans have better claims experience than firms overall. GAO analyzed 1996 MEPS study and found similar self-reported health characteristics (select medical conditions and percentage in excellent physical health and excellent mental health) for small firms (2-50 employees) and larger firms (more than 50 employees) but this may not have captured enough of the health conditions that lead to differences in claims (GAO 2001).

Premiums for small firms may be lower than actual costs (medical plus administrative expenses) because some insurers had losses in their small group business.[14] Some insurers,

[14] Data from eight small group filings by insurers in Colorado in 1997 showed that six of the eight insurers had loss ratios greater than expected and for four of these insurers, actual loss ratios were more than 10 percentage points higher than expected. For these six insurers, the premiums paid in 1997 were not adequate to cover medical and administrative expenses. In 1998, thirteen out of fourteen insurers in Colorado had loss ratios greater than expected

especially HMOs, do not adjust premium rates by group size to reflect actual costs. Strict rate regulation by some states may prevent insurers from raising premiums significantly, especially for small firms with relatively high claims. Some small firms may be able to shop aggressively for generous health plans at lower premiums.

To research actuarial values and premiums more carefully, it may be necessary to analyze health plans with identical benefits and similar health risks by firm size in the same geographic market. It would be difficult to find plans that meet these criteria and obtain the data for such a research study.

VI. Conclusions

Small firms pay similar prices to larger firms for health plans that have slightly less generous health benefits. According to the annual surveys of employers (MEPS and Kaiser/HRET), small firms with 50 or fewer employees pay slightly higher prices for health plans than larger firms for single coverage and similar prices for family coverage. The smallest firm size with fewer than 10 employees paid the highest single premiums. The 1997 RWJ showed little variation in premiums by firm size except that the largest firms had the highest single and family premiums. Our actuarial analysis of 1997 RWJ Survey of Employers showed that the generosity of health benefits increased slightly by firm size. Deductibles decreased by firm size while copayments and coinsurance increased slightly by firm size.

Small group health plans pay administrative expenses such as broker commissions (4% to 11% of premiums), premium taxes (2% to 3% of premiums), and profit/risk charges (4% to 5% of premiums) that self-insured plans do not pay and higher general administrative expenses (10% to 11% of premiums). In contrast, self-insured plans pay 5% to 11% of claims or 5% to 10% of

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and for ten of these insurers, actual loss ratios were more than 10 percentage points higher than expected. Continued losses could lead insurers to stop taking new business.

premiums for administrative expenses. We estimate that small group premiums pay 20% to 30% more in total premiums than self-insured health plans with similar claims per covered employee.

Despite the higher administrative costs to provide the same health insurance benefits and the relatively small difference in the generosity of the benefits, the premiums paid by small firms are similar or only slightly higher than those paid by large firms. Less than half of all small firms offer health plans. The small firms with health plans may have better claims experience and/or health status than larger firms.

There may be a number of reasons why the relatively small difference between the premium rates between large and small employers may not reflect the full differences in the cost to provide health insurance to large and small firms.

- The premiums are not adjusted for the variation in cost by the age-sex-geographic composition or occupations of the employees covered.
- State regulation restricts insurers from raising premiums significantly
- Some health insurers suffered losses on small group health insurance, in effect subsidizing the premium level of small employment groups.
- Some health insurers, especially HMOs, in effect subsidize small group coverage by not adjusting their premium rates to reflect the higher administrative costs.
- Some small firms are able to shop aggressively for health plans.

To further analyze premium and benefit differences by firm size, a study holding health plan characteristics, health status of enrollees, and geographic area constant may be required but there are few databases with sufficient detail to conduct such a study. It may also be useful to analyze data on premiums, benefits, and administrative expenses for small group health plans and other group health plans by insurer and state.

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Table 1
Kaiser Family Foundation and
Health Research and Educational Trust Surveys

All Plans by Firm Size

	All Plans	3-9	10-24	25-49	50-199	3-199	200-999	1000-4999	5000+	200+
Average Single Premiums (annual)										
1998	$2,100	$2,450	$1,980	$2,210	$2,160	$2,200				$2,080
1999	$2,270	$2,411	$2,146	$2,264	$2,215	$2,263	$2,201	$2,173	$2,347	$2,270
2000	$2,426	$2,823	$2,520	$2,622	$2,430	$2,535	$2,432	$2,408	$2,357	$2,380
2001	$2,610	$2,742	$2,702	$2,561	$2,775	$2,735	$2,706	$2,629	$2,562	$2,650
2002	$3,060	$3,419	$3,233	$2,867	$2,969	$3,100	$3,176	$3,046	$2,992	$3,042
Average Family Premiums (annual)										
1998	$5,530	$6,240	$4,910	$5,390	$5,350	$5,500				$5,540
1999	$5,742	$5,602	$5,459	$5,544	$5,706	$5,607	$5,831	$6,044	$5,655	$5,790
2000	$6,351	$6,655	$6,439	$6,859 *	$6,217	$6,398	$6,444	$6,386	$6,275	$6,330
2001	$7,124	$6,230 *	$6,837	$6,782	$7,158	$6,902	$7,024	$7,053	$7,196	$7,053
2002	$7,954	$7,599	$7,938	$7,791	$7,723	$7,737	$8,290 *	$8,189	$7,902	$8,047
Average single employee contribution (monthly)										
1998	$32	$49	$37	$39	$34	$39				$29
1999	$35	$25	$16	$27	$25	$24				$39
2000	$28					$26				$29
2001	$30					$25				$32
2002	$38	$31	$42	$34	$33	$34	$37	$38	$41	$40
Average family employee contribution (monthly)										
1998	$141	$223	$195	$192	$180	$194				$123
1999	$145	$99 *	$128	$164	$172 *	$144				$145
2000	$138					$163				$128
2001	$150					$189				$132
2002	$174	$148	$233 *	$260 *	$213 *	$207 *	$169	$155	$157	$161
Average single employee contribution % for plans reporting										
1998										
1999	16%					12%	12%	16%	21%	17%
2000	14%					14%	12%	17% *	14%	14%
2001	15%					13%	14%	18%	15%	16%
2002	16%					14%	15%	16%	17%	17%
Average family employee contribution % for plans reporting										
1998										
1999	32%					31%	34%	25%	33%	32%
2000	27%					34% *	26%	26%	24%	24%
2001	27%					37%	26%	27%	21% *	23%
2002	27%					34% *	26%	23% *	25%	24%

* Estimate is statistically different from all plans (level = .05)

Table 2
Kaiser Family Foundation and
Health Research and Educational Trust Surveys

All Plans by Firm size

	All Firms	3-9	10-24	25-49	50-199	3-199	200+
Increase in Premiums for All Plans							
1998	3.7%	8.0%	4.6%	6.1%	3.7%	5.2%	3.3%
1999	4.8%	9.2%	6.9%	6.5%	5.5%	6.9%	4.1%
2000	8.3%	8.4%	11.9%	7.7%	10.9%	10.3%	7.5%
2001	11.0%	16.5%	14.4%	11.5%	10.8%	12.5%	10.2%
2002	12.7%	14.5%	14.9%	14.2%	11.9%	13.2%	12.5%
PPO Deductibles (Preferred Provider)							
1998	186	380	241	242	192	246	163
1999	190					249	171
2000	187					235	168
2001	201					279	166
2002	276					311	260
POS Deductibles (Preferred Provider)							
1998	43	114	96	81	84	94	21
1999	79					89	76
2000	79					137	56
2001	84					124	66
2002	59					105 *	40
Conventional Deductibles							
1998	243	360		225	206	285	229
1999	245					277	235
2000	239					245	237
2001	195					296	150
2002	270					314	250

*Statistically different from all plans (.05 level)

Table 3
MEPS Survey of Private Establishments by Firm Size

	Total	<10 employees	10-24 employees	25-99 employees	100-999 employees	1000 or more employees	<50 employees	50 or more employees
Percentage of private establishments that offer health insurance								
1996	52.9%	34.2%	64.9%	80.8%	92.7%	96.7%	41.7%	93.9%
1997	52.4%	32.9%	63.5%	82.7%	93.8%	98.2%	40.4%	95.6%
1998	55.2%	35.9%	66.7%	83.8%	94.1%	99.2%	43.7%	96.3%
1999	58.4%	39.3%	69.9%	85.3%	95.2%	99.1%	47.1%	96.9%
2000	59.3%	39.6%	69.3%	84.5%	95.0%	99.2%	47.2%	96.8%
Average single premium								
1996	$1,992	$2,229 *	$2,016	$1,923 **	$1,901 **	$2,015	$2,070 *	$1,965
1997	$2,051	$2,209 *	$2,072	$1,982	$2,009	$2,056	$2,108	$2,030
1998	$2,174	$2,334 *	$2,271 *	$2,077 **	$2,114	$2,180	$2,230	$2,152
1999	$2,325	$2,553 *	$2,440 *	$2,345	$2,253	$2,276 **	$2,475 *	$2,269 **
2000	$2,655	$3,003 *	$2,780 *	$2,612	$2,561 **	$2,613	$2,827 *	$2,595 **
Average family premium								
1996	$4,954	$4,936	$4,944	$4,883	$4,836	$5,019	$4,938	$4,957
1997	$5,332	$5,102	$5,264	$5,120	$5,122	$5,490	$5,178	$5,367
1998	$5,590	$5,265 **	$5,606	$5,378	$5,380	$5,732	$5,442	$5,622
1999	$6,058	$5,888	$6,321 *	$5,933	$6,069	$6,072	$6,062	$6,057
2000	$6,772	$6,994	$6,860	$6,628	$6,606 **	$6,817	$6,868	$6,752
Average single employee contribution								
1996	$342	$326	$285 **	$320	$330	$373	$303 **	$355
1997	$320	$261 **	$285	$305	$333	$340	$284	$333
1998	$383	$272 **	$342	$345 **	$362	$439 *	$308 **	$411
1999	$420	$339 **	$424	$382 **	$386	$467 *	$378	$436
2000	$450	$396	$382 **	$451	$441	$476	$413 **	$462
Average family employee contribution								
1996	$1,275	$1,130	$1,361	$1,612 *	$1,478 *	$1,127 **	$1,367	$1,253
1997	$1,305	$1,194	$1,443	$1,611 *	$1,469 *	$1,174 **	$1,426	$1,278
1998	$1,382	$1,242	$1,752 *	$1,777 *	$1,521	$1,249 **	$1,551 *	$1,347
1999	$1,438	$1,357	$1,889 *	$1,819 *	$1,608 *	$1,272 **	$1,656 *	$1,390
2000	$1,614	$1,674	$1,884	$2,184 *	$1,880 *	$1,395 **	$1,894 *	$1,555
Average single employee contribution %								
1996	17.2%	14.6%	14.2% **	16.6%	17.4%	18.5%	14.7% **	18.1%
1997	15.6%	11.8% **	13.7%	15.4%	16.6%	16.6%	13.5%	16.4%
1998	17.6%	11.6% **	15.1% **	16.6%	17.1%	20.1% *	13.8% **	19.1% *
1999	18.1%	13.3% **	17.4%	16.3% **	17.1%	20.5% *	15.3% **	19.2%
2000	16.9%	13.2% **	13.7% **	17.3%	17.2%	18.2%	14.6% **	17.8%
Average family employee contribution %								
1996	25.7%	22.9%	27.5%	33.0% *	30.6% *	22.4% **	27.7%	25.3%
1997	24.5%	23.4%	27.4%	31.5% *	28.7% *	21.4% **	27.5%	23.8%
1998	24.7%	23.6%	31.3% *	33.0% *	28.3% *	21.8% **	28.5% *	24.0%
1999	23.7%	23.0%	29.9% *	30.7% *	26.5% *	21.0% **	27.3% *	22.9%
2000	23.8%	23.9%	27.5% *	32.9% *	28.5% *	20.5% **	27.6% *	23.0%

* Size estimate is significantly different than total (.05 level) - higher
** Size estimate is significantly different than total (.05 level) - lower

Table 4
MEPS Survey of Private Establishments

		50% or more Low Wage Employees			Less than 50% Low Wage Employee		
	Total	Subtotal	<50 employees	50 or more employees	Subtotal	<50 employees	50 or more employees
Average single premium (annual)							
1996	$1,992	$1,896 **	$2,100 *	$1,824	$2,001	$2,040	$1,980
1997	$2,051	$1,878 **	$2,062	$1,818	$2,060	$2,109	$2,032
1998	$2,174	$2,017	$2,252	$1,896	$2,156	$2,234 *	$2,108
1999	$2,325	$2,204 **	$2,450	$2,054	$2,333	$2,464 *	$2,253 **
2000	$2,655	$2,557 **	$2,737 *	$2,474	$2,659	$2,822 *	$2,565 **
Average family premium (annual)							
1996	$4,954	$4,643 **	$4,696	$4,628	$4,933	$4,915	$4,939
1997	$5,332	$4,643 **	$4,979	$4,551	$5,285	$5,189	$5,321
1998	$5,590	$5,274	$5,302	$5,260	$5,459	$5,486	$5,448
1999	$6,058	$5,832	$5,877	$5,814	$5,998	$6,058	$5,974
2000	$6,772	$6,334	$6,251	$6,364	$6,753	$6,933	$6,685
Average single employee contribution (annual)							
1996	$342	$381	$327 **	$400	$320	$292	$335
1997	$320	$382 *	$348	$393	$299	$278	$310
1998	$383	$445 *	$401	$468	$339 **	$305	$361
1999	$420	$435	$378	$462	$319 **	$413 *	$312
2000	$450	$536 *	$547	$522	$394 **	$380	$402
Average family employee contribution (annual)							
1996	$1,275	$1,749 *	$1,813	$1,732	$1,269	$1,352	$1,240
1997	$1,305	$1,544 *	$1,489	$1,559	$1,304	$1,418	$1,262
1998	$1,382	$1,563	$1,450	$1,617	$1,380	$1,573 *	$1,305
1999	$1,438	$1,603	$1,725	$1,565	$922 **	$1,059 *	$911
2000	$1,614	$2,103 *	$1,937	$2,164	$922 **	$716 **	$936
Average single employee contribution (% premium)							
1996	17.2%	20.1%	15.6% **	21.9%	16.0%	14.3%	16.9%
1997	15.6%	20.3%	16.9%	21.6%	14.5%	13.2%	15.3%
1998	17.6%	22.1%	17.8%	24.7%	15.7%	13.6%	17.1%
1999	18.1%	21.8%	20.3%	22.9%	16.2%	15.0%	17.0%
2000	16.9%	20.7%	20.0%	21.1%	14.8%	13.5%	15.7%
Average family employee contribution (% premium)							
1996	25.7%	37.7%	38.6%	37.4%	25.7%	27.5%	25.1%
1997	24.5%	33.3%	29.9%	34.3%	24.7%	27.3%	23.7%
1998	24.7%	29.6%	27.3%	30.7%	25.3%	28.7% *	23.9%
1999	23.7%	30.6%	24.7%	33.0%	25.2%	27.5% *	24.2%
2000	23.8%	33.2%	31.0%	34.0%	24.4%	27.0%	23.4%

* Estimate is significantly different than total or subtotal (.05 level) - higher
** Estimate is significantly different than total or subtotal (.05 level) - lower

Table 5
MEPS Survey of Private Establishments

		without Union Employees			with Union Employees		
	Total	Subtotal	<50 employees	50 or more employees	Subtotal	<50 employees	50 or more employees
Average single premium (annual)							
1996	$1,992	$1,952	$2,016	$1,920	$2,294 *	$2,768 *	$2,237
1997	$2,051	$2,023	$2,088	$1,993	$2,172 *	$2,344	$2,158
1998	$2,174	$2,126	$2,225	$2,077	$2,258	$2,439	$2,238
1999	$2,325	$2,297	$2,440	$2,227 **	$2,468 *	$3,205 *	$2,407
2000	$2,655	$2,599 **	$2,784	$2,520 **	$2,803 *	$3,679 *	$2,728
Average family premium (annual)							
1996	$4,954	$4,870	$4,880	$4,867	$5,083	$5,297	$5,058
1997	$5,332	$5,266	$5,196	$5,288	$5,518	$4,987	$5,560
1998	$5,590	$5,490	$5,513	$5,482	$5,821	$5,237	$5,869
1999	$6,058	$6,026	$6,063	$6,014	$6,160	$6,082	$6,162
2000	$6,772	$6,767	$6,862	$6,741	$6,661	$6,966	$6,641
Average single employee contribution (annual)							
1996	$342	$349	$303 **	$371	$301	$284	$303
1997	$320	$330	$284	$352	$252 **	$182	$258
1998	$383	$385	$316 **	$419	$295 **	$150	$311
1999	$420	$435	$378 **	$462	$319 **	$413	$312
2000	$450	$460	$420 **	$477	$331 **	$259	$337
Average family employee contribution (annual							
1996	$1,275	$1,470 *	$1,440	$1,481	$855 **	$902	$849
1997	$1,305	$1,439 *	$1,507	$1,418	$931 **	$601	$958
1998	$1,382	$1,586 *	$1,677	$1,558	$851 **	$644	$868
1999	$1,438	$1,604 *	$1,725 *	$1,565 **	$922 **	$1,059	$911
2000	$1,614	$1,831 *	$2,002 *	$2,164	$922 **	$716	$936
Average single employee contribution (%)							
1996	17.2%	17.9%	15.0%	19.3%	13.1% **	10.3%	13.5%
1997	15.6%	16.3%	13.6% **	17.6%	11.6% **	7.8%	11.9%
1998	17.6%	18.1%	14.2% **	20.2%	13.1% **	6.2%	13.9%
1999	18.1%	18.9%	15.5% **	20.8% *	12.9% **	12.9%	12.9%
2000	16.9%	17.1%	15.1% **	18.9%	11.9% **	7.1% **	12.4%
Average family employee contribution (%)							
1996	25.7%	30.2% *	29.5%	30.4%	16.8% **	17.0%	16.8%
1997	24.5%	27.3% *	29.0%	26.8%	16.9% **	12.1%	17.2%
1998	24.7%	28.9% *	30.4%	28.4%	14.6% **	12.3%	14.8%
1999	23.7%	26.6% *	28.4%	26.0%	15.0% **	17.4%	14.8%
2000	23.8%	27.1% *	29.2% *	26.5%	13.8% **	10.3%	14.1%

* Estimate is significantly different than total or subtotal (.05 level) - higher
** Estimate is significantly different than total or subtotal (.05 level) - lower

Exhibit I
Administrative Expenses as % Premium

	Total Admin Expenses	General Admin plus Commissions	General Admin	Commissions	Taxes License Fees	Investment Income	Profit and Contingency	Profit if separate
West Virginia Insurance Dept								
Insurer 1 for 2000	20.0%	14.4%	9.8%	4.6%	2.1%		3.5%	3.5%
Insurer 2 for 2000	25.5%	17.1%	12.3%	4.8%	5.2%	-2.6%	5.7%	5.7%
Insurer 3 for 2001	29.8%	12.6%	11.0%	1.6%	1.9%		2.0%	
Insurer 4 for 2002	25.0%	17.0%					4.0%	4.0%
Unweighted average	25.1%	15.3%	11.0%	3.7%	3.1%	-2.6%	3.8%	4.4%
Minimum	20.0%	12.6%	9.8%	1.6%	1.9%	-2.6%	2.0%	3.5%
Maximum	29.8%	17.1%	12.3%	4.8%	5.2%	-2.6%	5.7%	5.7%
Number of responses	4	4	3	3	3	1	4	3

Exhibit II
Administrative Expenses as % Premium

	Total Admin Expenses	General Admin plus Commissions	General Admin	Commissions	Taxes License Fees	Investment Income	Profit and Contingency	Profit if separate
Colorado Insurance Dept (Small Group (1- 50 employees)								
Insurer 1 2001	28.0%	23.6%	10.6%	13.0%	2.3%	-1.6%	3.8%	
Insurer 2 2000	35.0%	25.0%			3.0%		7.0%	5.0%
Insurer 3 2000	21.5%	18.5%			2.3%		3.0%	
Insurer 3 2001	25.0%	21.0%			2.3%		4.0%	
Insurer 4 2001	22.0%	13.3%	9.3%	4.0%	4.1%	-1.0%	5.6%	
Insurer 5 2001	26.2%	18.6%	9.0%	9.6%	3.2%		4.4%	
Insurer 5 1999	25.9%	19.1%	9.1%	10.0%	3.2%		3.6%	
Insurer 6 2001	20.7%							
Insurer 7 2001	28.6%	21.0%	11.0%	10.0%	2.3%	-2.3%	7.6%	
Insurer 8 2001	38.0%	29.8%	8.8%	21.0%	2.3%		6.0%	
Insurer 9 2001	38.0%	29.8%	8.8%	21.0%	2.3%		6.0%	
Insurer 10 2002	28.0%	23.0%			2.0%		3.0%	
Insurer 11 2000	25.2%	17.9%	13.5%	4.4%	2.0%	-2.6%	7.9%	
Insurer 12 2000	27.0%	21.0%			2.0%		4.0%	
Insurer 12 2001	25.0%	19.0%			2.0%		4.0%	
Insurer 13 2001	27.0%	24.0%			2.0%	-2.0%	3.0%	
Insurer 14 2001	27.2%	18.7%	12.0%	6.7%	2.0%		6.5%	
Insurer 15 2001	24.5%	18.5%	10.5%	8.0%	2.0%		4.0%	
Unweighted average	27.3%	21.1%	10.2%	10.5%	2.4%	-2.0%	5.0%	5.0%
Minimum	20.7%	13.3%	8.8%	4.0%	2.0%	-2.6%	3.0%	5.0%
Maximum	38.0%	29.8%	13.5%	21.0%	4.1%	-1.0%	7.9%	5.0%
Number of responses	18	17	10	10	17	5	17	1

Exhibit III
Commission Rate Schedules by State

		Group Size	Commissions	Renewal Commissions if different
Arizona				
Aetna 2002		$ 0 - $200,000	5.0%	
Source: Beerepurves webpage		$200,001- $400,000	4.0%	
		$400,001-$1,000,000	3.0%	
		$1m - $4 m	2.0%	
		$4m +	1.0%	
	Dental	$ 0 - $20,000	8.0%	
		$20,001- $30,000	5.0%	
		$30,001-$400,000	4.5%	
California				
Aetna 2002		$ 0 - $200,000	5.0%	
Source: Beerepurves webpage		$200,001- $400,000	4.0%	
		$400,001-$1,000,000	3.0%	
		$1m - $4 m	2.0%	
		$4m +	1.0%	
	Dental	$ 0 - $20,000	8.0%	
		$20,001- $30,000	5.0%	
		$30,001-$400,000	4.5%	
Aetna June 2002		$ 0 - $250,000	7.0%	new business
Source: Beerepurves webpage				
Aetna June 2002		2-125 employees	7.0%	
Source: WarnerPacific webpage				
Blue Cross of California 2002	small group 2-50	$ 0 - $30,000	10.0%	
Source: Beerepurves webpage		$30,001- $50,000	6.0%	
		$50,001- $100,000	3.0%	
		$100,001-$250,000	1.65%	
		$250,001-$500,000	1.25%	
		large group 51+	5.0%	
Blue Cross of California 2002		2-50 employees	10.0%	
Source: WarnerPacific webpage		51-124	5.0%	
Blue Cross of California Dental 2002	Dental	small group 2-50	10.0%	
	PPO Dental	large group 51+	5.0%	
Blue Shield up to April 2002		$ 0 - $15,000	10.0%	
Source: Claremont webpage		$15,001- $30,000	6.0%	
with < 250 in total book of small group		$30,001-$100,000	4.0%	
		$100,000 +	2.0%	
Blue Shield after April 2002		$ 0 - $7,500	5.0%	
with < 250 in total book of small group		$ 7,501- $50,000	9.0%	
new groups only		$50,001- $100,000	3.0%	
		$100,000-$250,000	1.65%	
Blue Shield up to April 2002		$ 0 - $7,500	10.0%	
with > 250 in total book of small group		$ 7,501- $30,000	10.0%	
		$30,001- $50,000	8.0%	
		$50,001- $100,000	6.0%	
		$100,001-$200,000	3.0%	
		$200,001-$250,000	2.0%	
Blue Shield after April 2002		$ 0 - $7,500	5.0%	
with > 250 in total book of small group		$ 7,501- $30,000	10.0%	
new groups only		$30,001- $50,000	10.0%	
		$50,001- $100,000	4.0%	

Exhibit III
Commission Rate Schedules by State

		Group Size	Commissions	Renewal Commissions if different
		$100,001-$200,000	2.0%	
		$200,001-$250,000	2.0%	
Blue Shield 2002	dental groups		10.0%	
Source: Claremont webpage				
Blue Shield 2002 PPO,HMO		individual	15.0%	
Source: WarnerPacific webpage				
California Choice 2002	medical	2-50 employees	7.0%	
Source: Beerepurves webpage	dental	2-50 employees	12.0%	
Community Health HMO 2002		2-50 employees	8.0%	
Source: WarnerPacific webpage				
CPIC Group Vision Insurance 2002		10-50	10.0%	
Claremont webpage		51-149	7.5%	
		150-449	6.0%	
		450+	negotiable	
Delta Dental 2002	dental	5-99 employees	10.0%	
Source: Beerepurves webpage		100-399	4.0%	
Golden West 2002	dental PPO	10-99 employees	8.0%	
Source: WarnerPacific webpage	dental prepaid	2-99 employees	10.0%	
Health Net 2002	small group 2-50	$ 0 - $30,000	10.0%	
Source: Beerepurves webpage		$30,001- $50,000	6.0%	
		$50,001- $100,000	3.0%	
		$100,001-$250,000	1.65%	
		$250,001-$500,000	1.25%	
	large group 51+		5.0%	
Health Net 2002		small group 2-50	10.0%	
Source: WarnerPacific webpage		individual	10.0%	
Kaiser 2000		$ 0 - $30,000	8.0%	
Source: Managed Care May 2000		$30,001- $50,000	6.0%	
		$50,001- $100,000	4.0%	
		$100,001-$250,000	2.0%	
		$250,001-$500,000	1.5%	
		$500,001-$1m	0.5%	
		$1m - $5 m	0.3%	
Nationwide 2002	PPO	individual	18.0%	
Source: WarnerPacific webpage				
Pacificare 2000	Internet sales	small groups	3.0%	10-12% reduction in Premiums
Source: Managed Care May 2000				
	non-Internet sales	small groups	up to 10%	
Principal 2002	dental	5-99 employees	10.0%	
Source: WarnerPacific webpage				
SmileSaver 2002	dental	5+ employees	10.0%	
Source: WarnerPacific webpage				
VSP 2002	vision	5+ employees	8.0%	
Source: WarnerPacific webpage				
WellPoint 2000		groups	up to 10%	
Source: Managed Care May 2000				

Exhibit III
Commission Rate Schedules by State

		Group Size	Commissions	Renewal Commissions if different
Colorado Source: instarbenefits webpage				
Allied 2002		2-5 lives	8.0%	
		6-20	7.0%	
		21+	6.0%	
Central Reserve Life 2002		2-4 lives	5.0%	
		5-25	8.0%	
		26-50	6.0%	
Continental General 2002		individual	20.0%	7.0%
Foundation HMO 2002		1-4 lives	2.0%	
		5-9	4.0%	
		10-50	7.0%	
		individual	$140 per adult	7.5% 2nd year
			$70 per child	5.0% 3-5 years
Reliance 2002		individual	20.0%	5.0%
Preferred Choice HMO 2002		1-3 lives	3.0%	
		4-50	8.0%	
Wellcare HMO 2002	groups	$0 - $10,000	3.0%	
		$10,001- $15,000	6.0%	
		$15,001+	8.0%	
		individual	10.0%	
Connecticut				
Source: Connecticare webpage				
ConnectiCare HMO small group 2001/2002		1-50 employees	5.0%	
ConnectiCare HMO large group 2002		First $500,000	4.0%	4.0%
		Next $500,000	3.0%	2.0%
		Over $1m	2.0%	1.0%
Massachusetts				
New England Financial 2000 (NEF webpage)		1-2 lives	5.0%	
		3-14 lives	7.0%	
Michigan				
Blue Cross Blue Shield of Michigan 2002	group	2-10	4.0%	
Source: hcaweb.net	group	11-99	5.0%	
	association	2-10	5.0%	
	association	11-99	6.0%	
	association	individual	3.0%	

Exhibit III
Commission Rate Schedules by State

	Group Size	Commissions	Renewal Commissions if different
Mid-Atlantic States			
Kaiser Mid Atlantic 2000	2-50 employees	5.0%	
Source: KFHP webpage	51-250	4.0%	
	251-500	2.0%	
	501+	Negotiable	
Missouri Source: HCFA HIPAA webpage			
HMO Missouri 2000 and	$ 0 - $15,000	10.00%	
Healthy Alliance Life 2000	$15,001- $30,000	7.50%	
	$30,001- $50,000	5.00%	
	$50,001- $100,000	2.00%	
	$100,001-$150,000	1.00%	
	over $250,000	0.50%	
New Jersey Insurers NAS webpage			
Aetna 2002	2-50 employees	5.5%	new only
AmeriHealth 2002	2-50 employees	5.0%	
CIGNA 2002	2-50 employees	5.0%	
Guardian/Health Net 2002	2-50 employees	5.0%	+ incentives
Oxford 2002	2-50 employees	4.5%	
United HealthCare 2002	2-50 employees	5.0%	+ incentives
WellChoice 2002	2-50 employees	5.0%	+ incentives
New York			
Atlantic Health Plan 2000/2001	groups	4.0%	
GHI 2002 (GHI webpage)	2-50 employees	4% to 5.5%	
New England Financial 2000 (NEF webpage)	1-50 lives	3.0%	
North Carolina			
CIGNA Healthcare of North Carolina 2002	1-9 employees	1.0%	
Source: Casongroup webpage	10-24	6.0%	
	25-50	7.0%	
New England Financial 2000 (NEF webpage)	1-2 lives	5.0%	
	3-14 lives	7.0%	
Pennsylvania			
Aetna 2002	2-50 employees	5.0%	
Source: Bollingerga webpage			
Rhode Island			
Blue Cross Blue Shield of Rhode Island 2002	$ 0 - $100,000	4.0%	+persistence bonus
Source: BrokerNetUSA webpage	$100,000-$175,000	3.5%	+persistence bonus
	$175,001-$350,000	1.5%	+persistence bonus
	$350,001-$875,000	1.0%	+persistence bonus
	$875,001-$1,750,000	0.5%	+persistence bonus
	$1.75 m - $3.5	0.25%	+persistence bonus

Exhibit III
Commission Rate Schedules by State

		Group Size	Commissions	Renewal Commissions if different	
South Carolina	Casongroup webpage				
Insurers					
Blue Cross Blue Shield of South Carolina 2002		2-24 employees	$15/month	$0- $10,000	8.0%
		25-50	$17/month	$10,001- $25,000	6.0%
		50 +	$20/month	$25,001- $50,000	4.0%
				$50,001- $75,000	3.0%
				$75,001- $150,000	2.0%
Starmark 2002		2-10 lives	8.0%	5.0%	
		11-25 lives	7.0%	4.0%	
		26+ lives	6.0%	3.0%	
Trustmark 2002		50+	5.0%	5.0%	
HMOs					
Carolina Care Plan small group 2002		0-34 subscribers	$200 annual	$17.17 per subscriber/month	
		35-49	$220		
		50-99	$235		
		100+	$260		
Carolina Care Plan large group 2002		$ 0 - $15,000	10.0%		
(51+ employees)		$15,001- $30,000	7.5%		
		$30,001- $50,000	5.0%		
		$50,001-$250,000	4.0%		
CIGNA Healthcare of South Carolina 2002			$22 per subscriber +bonus	$20 per subscriber	
Utah 2002	IHC webpage				
IHC HMO small group (2-50 employees)		4-30 subscribers	9%		
		31-50	7%		
		51-80	5%		
		31-92	4%		
IHC HMO large group (51+ employees)		$ 0 - $150,000	5%		
		next $200,000	4%		
		next $400,000	3%		
		next $700,000	2%		
		next $1,500,000	1%		
		$2,950,000 +	1%		
Washington					
Regence BlueShield and RegenceCare 2002		1-3 subscribers	2.0%		
Source: wa.regence webpage		4-50	5.0%		
		51+	negotiable		
		individual	4.0%		
Insurance Companies in Wisconsin	State of Wisconsin Insurance Dept. financial examination reports on webpage				
American Dental Plan of WI 2000		1-25 employees	12.0%		
		25-49 employees	10.0%		
		monthly <$10,000	7.0%		
		monthly >$10,000	5.0%		
CarePlus Dental 1998		groups	3 - 5%		
Blue Cross Blue Shield United of Wisconsin 1997		internal sales force			
Employers Life Insurance of WI 1996	medical	groups	0.5% to 4.0%		
	dental	groups	1.4% to 8.1%		
		stop loss	10.0%		

Exhibit III
Commission Rate Schedules by State

	Group Size	Commissions	Renewal Commissions if different
Racine Dental Plan 1998	groups	4% to 6%	
Wausau Preferred Health Insurance 1996	groups	.05% to 4%	
HMOs in Wisconsin			
Compcare 1998	<$15,000	8.0%	
	$15,000-$30,000	7.0%	
	$30,000-50,000	5.0%	
	$50,000-100,000	2.5%	
	$100,000-250,000	1.0%	
	$250,000-1,000,000	0.5%	
	$1,000,000+	0.25%	
Family Health Plan Cooperative 1997	1-25 employees	8%	
	26-49	6%	
	50-99	3%	
	100-249	2%	
	250-499	2%	
	500-999	1%	
	1000+	0.5%	
Greater LaCross HMO 1999	no outside agents		
Group Health Cooperative 1998	no outside agents		
Mercy Care Insurance 1998		3% to 8%	
Security Health Plan 1997	<$15,000	8.27%	
	$2,000,000+	0.09%	
	other groups	flat 2.5% to 4.0%	
United Health of Wisconsin 1997	<$5,000 -$200,000+	12% to 0.25%	6% to 0.25%
	2-99 employees	5.5% paid to Employers health insurance	
United HealthCare of Wisconsin 2000	small groups	$7.70 to $13.64 per member per month	
	large groups	1% to 13%	
Unity Health Plan 1999	individual and groups	.05% to 10%	
Valley Health Plan 1999 no outside agents for group	individual	9.0%	
2000	individual	$22 per contract per month	

Exhibit IV
1997 Robert Wood Johnson Survey
Employer Health Insurance Survey
Regression Results

Variable	Name of Variable	Regression Coefficients	Level of Significance
	Log of Actuarial Value is the dependent variable		
constant		1.899	0.000 *
SIC1	Agriculture	0.00133	0.888
SIC2	Construction	-0.00764	0.000 *
SIC3	Mining	-0.00150	0.405
SIC4	Transportation	-0.00230	0.311
SIC5	Wholesale	-0.00208	0.353
SIC6	Retail	-0.00303	0.117
SIC7	Financial Services	-0.00058	0.750
SIC8	Professional Services	-0.00017	0.922
SIC9	Other	-0.00257	0.258
SIC11	Total employees at location is 5000 or more	-0.00939	0.068
Union	has union employees	0.00448	0.000 *
Size1	Total employee size 1-9	-0.01050	0.000 *
Size2	Total employee size 10-25	-0.00491	0.001 *
Size3	Total employee size 26-50	omitted	
Size4	Total employee size 51-199	-0.00455	0.003 *
Size5	Total employee size 200-999	0.00860	0.000 *
Size6	Total employee size 1000 or more	0.01153	0.000 *
HWage	Percent of permanent employees earning $15 or more per hour	0.00005	0.000 *
Plans	Number of general medical plans	0.00001	0.098

Adjusted R Square = .022
N = 17854

Actuarial Value measures what percentage of total medical costs are paid by the health plans after deductibles, cost-sharing and non-covered services

* Significant at less than 0.01 level

Exhibit V
1997 RWJ Employers Offering Health Insurance
Weighted Averages

Firm Size Total Employees	Plan Enrollees	Plan Enrollees Active Employees	with Union	%Union	% Wages <$5	% Wages $15+
All Plans						
1-9	4	4	2.8%	2.0%	3.5%	37.3%
10-25	12	12	5.0%	3.5%	1.9%	34.5%
26-50	25	25	6.7%	3.4%	1.9%	31.9%
51-199	66	64	7.9%	4.5%	3.0%	31.7%
200-999	233	222	14.8%	8.5%	1.7%	35.9%
1000+	2276	2099	21.0%	11.6%	3.6%	34.7%
Total	1090	1007	14.6%	8.2%	2.9%	34.5%
HMOs						
1-9	4	4	2.2%	1.3%	3.5%	36.4%
10-25	12	12	5.0%	3.5%	1.4%	32.7%
26-50	25	24	7.7%	4.1%	2.4%	30.7%
51-199	70	68	5.9%	3.5%	4.5%	24.9%
200-999	224	200	11.7%	5.4%	2.1%	33.8%
1000+	1915	1728	27.0%	14.7%	1.4%	40.3%
Total	839	758	15.4%	8.3%	2.3%	34.9%
PPO/POS						
1-9	4	4	2.4%	1.7%	3.3%	39.3%
10-25	13	13	4.4%	3.2%	2.1%	35.7%
26-50	25	25	6.2%	2.9%	1.5%	33.1%
51-199	63	61	7.6%	4.1%	1.8%	34.2%
200-999	238	232	16.9%	10.0%	1.4%	38.6%
1000+	2550	2377	19.1%	10.1%	5.0%	33.8%
Total	1235	1154	14.3%	7.9%	3.3%	35.3%
FFS						
1-9	4	4	4.7%	0.04	0.04	0.34
10-25	12	12	6.7%	0.05	0.02	0.34
26-50	26	25	6.4%	0.04	0.02	0.30
51-199	69	66	14.4%	0.08	0.03	0.39
200-999	231	224	11.7%	0.09	0.02	0.26
1000+	1962	1789	17.7%	0.12	0.03	0.29
Total	1060	970	13.9%	0.09	0.03	0.31
# Plans						
1-9	3790	3790	3790	3790	3789	3789
10-25	3404	3404	3404	3404	3404	3404
26-50	2576	2576	2576	2576	2576	2576
51-199	3003	3003	3003	3003	2993	2993
200-999	2350	2350	2350	2350	2348	2348
1000+	4313	4313	4313	4313	4309	4309
Total	19436	19436	19436	19436	19419	19419

Exhibit VI
1997 RWJ Employers Offering Health Insurance
Weighted Averages

Firm Size Number of Total Employees	Deductible	Copay	Coinsurance	Single Premium	Family Premium	Employer Single Share	Employer Family Share	Actuarial Value
All Plans								
1-9	$212	$6.01	15.0%	$179	$425	91.1%	78.5%	78.3%
10-25	$186	$6.15	15.8%	$168	$411	87.5%	66.8%	79.7%
26-50	$158	$6.33	16.8%	$164	$420	84.9%	62.3%	79.8%
51-199	$128	$7.61	16.8%	$167	$410	83.8%	63.0%	81.0%
200-999	$140	$7.54	17.7%	$163	$423	83.0%	67.7%	82.3%
1000+	$163	$8.76	17.8%	$186	$476	84.7%	73.7%	82.6%
Total	$158	$7.85	17.2%	$175	$444	84.9%	70.0%	81.6%
HMOs								
1-9	$133	$4.50	16.8%	$169	$401	89.8%	75.6%	78.6%
10-25	$116	$4.85	17.8%	$157	$387	86.9%	65.6%	80.0%
26-50	$85	$3.88	17.2%	$156	$413	83.0%	59.6%	80.4%
51-199	$58	$5.36	18.1%	$164	$419	83.6%	62.5%	80.5%
200-999	$58	$5.67	17.3%	$142	$396	83.7%	67.6%	80.6%
1000+	$57	$5.70	16.0%	$169	$439	85.1%	75.2%	81.5%
Total	$70	$5.26	16.9%	$161	$418	84.9%	69.7%	80.7%
PPO/POS								
1-9	$216	$6.12	15.7%	$183	$435	91.1%	79.3%	78.0%
10-25	$189	$6.04	15.8%	$171	$417	87.3%	65.2%	80.0%
26-50	$174	$6.70	17.6%	$169	$423	86.5%	63.1%	79.1%
51-199	$145	$6.85	16.6%	$165	$396	84.8%	62.7%	80.7%
200-999	$168	$7.22	18.4%	$170	$435	81.7%	67.2%	82.6%
1000+	$182	$8.72	20.3%	$193	$495	85.1%	73.3%	82.3%
Total	$176	$7.70	18.4%	$181	$455	84.9%	69.7%	81.5%
FFS								
1-9	$338	$6.68	6.3%	$185	$441	93.4%	81.6%	78.4%
10-25	$317	$7.08	6.6%	$179	$441	89.3%	74.2%	78.3%
26-50	$290	$7.12	9.9%	$168	$426	83.4%	66.0%	80.8%
51-199	$244	$10.43	8.2%	$186	$442	80.7%	65.6%	83.8%
200-999	$204	$9.55	10.5%	$178	$429	87.8%	70.5%	84.9%
1000+	$264	$9.62	7.9%	$188	$473	82.6%	72.7%	85.4%
Total	$264	$9.16	7.9%	$184	$455	84.6%	71.9%	83.7%
# Plans								
1-9	3790	1815	2692	3790	3609	3790	3609	3790
10-25	3404	1435	2430	3404	3334	3404	3334	3404
26-50	2576	1005	1859	2576	2554	2576	2554	2576
51-199	3003	1414	1946	3003	2977	3003	2977	3003
200-999	2350	1199	1394	2350	2337	2350	2337	2350
1000+	4313	2295	2331	4313	4295	4313	4295	4313
Total	19436	9163	12652	19436	19106	19436	19106	19436