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Premiums in Regional Health Alliances Under the Clinton Administration's Proposed Health Security Act

An Actuarial Opinion and Report on
Premiums in Regional Health Alliances under the Health Security Act

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HIAA

Health Insurance Association of America

EXECUTIVE SUMMARY

This actuarial memorandum represents the first, formal actuarial opinion regarding the reasonableness of the premium estimates the Clinton Administration presented with its proposed Health Security Act.

The Health Insurance Association of America (HIAA) has estimated that the national average for 1994 premiums in the Regional Health Alliances would be $2,509 annually for a single person and $7,278 for a two-parent family. These premiums are the best estimates for the national average from within probable ranges of from $2,358 to $2,632 annually for single persons and $6,840 to $7,634 annually for two-parent families.

Compared to the Administration's estimates of $1,932 annually for a single person and $4,360 for a two-parent family, HIAA's estimates are 30 percent and 67 percent higher, respectively. On average, the Administration's estimates are about one-third lower than ours.

We developed our premiums to be comparable to the Administration's estimates of 1994 average premiums within the Regional Health Alliances, assuming the Administration's entire proposal is fully implemented. Its premium estimates can be found on page 112 of *Health Security: The President's Report to the American People* and represent estimates of premiums for the high cost-sharing standard benefit plan (i.e., much like conventional, fee-for-service insurance).

We also compared our estimates to preliminary ones prepared by Hewitt Associates, an employee benefits consulting firm, which were presented in Congressional testimony. Compared to Hewitt's estimates of $2,440 annually for a single person and $6,946 for a two-parent family, HIAA's estimates are 3 and 5 percent higher, respectively. This is well within a reasonable level of difference.

Obvious questions arise from these findings. If the Administration's premium estimates are one-third too low:

1. What does this mean for the Administration's estimates of subsidies for low-income persons and employers?

2. Will a larger proportion of the population pay more for health insurance after reforms than the Administration has estimated?

3. What would happen if the Administration's estimates were used as the basis for its proposed premium caps?

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Our premium estimates should only be used for comparison with the estimates the Clinton Administration presented with the proposed Health Security Act, or for comparison with other premium estimates developed for comparison with the Clinton Administration's estimates. They are not appropriate for any other purpose.

A draft of this report was sent to about two dozen interested actuaries and researchers for peer review. About half of them responded. Their comments along with our responses are included in a special section: "Comments from Reviewers."

The Administration's, Hewitt Associates' and HIAA's premium estimates are presented side by side in Table 1 on the next page. Annual and monthly premiums are presented. The monthly premiums are the annual figures divided by 12.

The chart on the page following Table 1 graphically shows our estimates of the monthly premiums for single persons and two-parent families compared to the Administration's and Hewitt Associates' estimates.

Table 1

Premiums in Regional Health Alliances Under the Clinton Administration's Proposed Health Security Act

(National Average Premiums for High Cost–Sharing Plan)

Annual Premiums

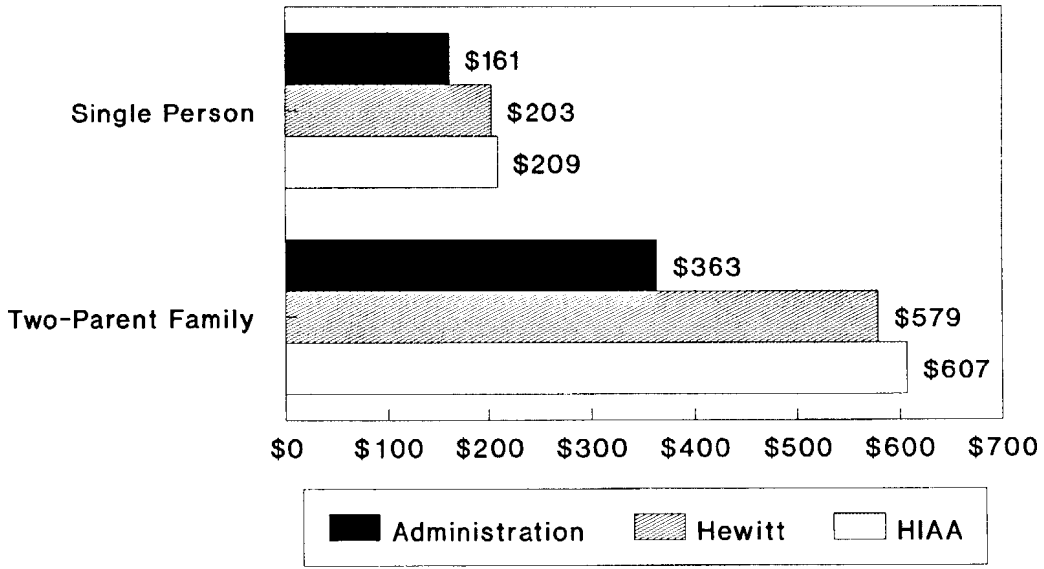
Family Status	Clinton Administration	Hewitt Associates	HIAA
Single	$1,932	$2,440	$2,509
Couple	$3,865	$4,880	$5,419
Single–Parent Family	$3,893	$4,619	$4,270
Two–Parent Family	$4,360	$6,946	$7,278

Monthly Premiums

Family Status	Clinton Administration	Hewitt Associates	HIAA
Single	$161	$203	$209
Couple	$322	$407	$452
Single–Parent Family	$324	$385	$356
Two–Parent Family	$363	$579	$607

Sources: "Health Security: The President's Report to the American People," page 112 (Administration's estimates); Testimony before U.S. House Subcommittee on Health and the Environment of the Committee on Energy and Commerce, November 22, 1993 (Hewitt Associates' estimates); and HIAA

Estimates of Monthly Premiums*
Under the Proposed Health Security Act



Source: HIAA

* High cost-sharing (fee-for-serv.) Plan

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Actuarial Memorandum
Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

P. Anthony Hammond, ASA, MAAA

This memorandum presents the assumptions and methods used to develop an average 1994 premium estimate for the Clinton Administration's standard benefit package. In calculating premium rates within Regional Health Alliances under the Health Security Act, I had to assume, as the Administration had assumed, that all coverage and administrative requirements under the Act were fully implemented on 1/1/94.[1]

In developing the premium, I used a standard actuarial approach, which included the following steps:

(1) Defining a database of claims appropriate for pricing the risks to be incurred and calculating the average expected (base) claims cost from this database;

(2) Making appropriate adjustments to the claims cost derived from the database in order to develop the net premium (before expenses, margins, etc.);

(3) Determining appropriate adjustments to the net premium (usually referred to as retention or loading and expressed as a percent of the gross premium, i.e., total premium after loading is added into the net premium);

(4) Combining steps (1) through (3) to determine the gross premium; and,

(5) Sensitivity testing the rating formula to look for any factor or assumption that could skew the actual results from the expected results.

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[1] There are several reasons why premiums developed in such a manner do not represent real premiums that anyone might actually pay to any health plan in 1994, even if the Health Security Act were enacted. For example, universal coverage may actually take years to implement. But, since the Administration's premium estimates assume that universal coverage is fully implemented in a mature market, I made the same assumption in producing my estimates so my figures could be compared to theirs.

These premium estimates should only be used for comparison with the premium estimates the Clinton Administration presented with the proposed Health Security Act or for comparison with other premium estimates developed specifically for the same purpose.

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Each of these five steps is summarized briefly in the next two pages and then in greater detail in the remainder of this memo.

First, I developed a base claims cost for a single person by asking several commercial carriers to estimate the 1994 expected claims cost for employer groups with the standard benefit package described in the 9/7/93 working-group draft of the Administration's reform proposal. I then averaged these carriers' estimates together with another estimate I derived from the Tillinghast Group Rating Manual. All the estimates were nationally representative, and I adjusted them for subsequent changes in the benefit package as well as other factors.

Using the March 1992 Current Population Survey's data on the distribution and average size of currently insured families, claim cost factors from the Tillinghast Group Rating Manual, and the base claims cost for a single person, I developed base claims costs for couples, single-parent families and two-parent families. I then adjusted these base claims costs for changes in the average claims cost that would result from moving to universal coverage, including a migration adjustment to reflect the uninsured becoming insured under the Act. For this adjustment I used nationally representative data from the 1987 National Medical Expenditure Survey (NMES). In short, I developed the base claims cost and adjusted for changes in the covered population. The method and assumptions are described in sections 1 & 2, below.

The second step (developing the net premium) is detailed in sections 3, 4, and 5. Changes in the base claims cost are made to reflect the average expected claims cost or net premium for the population actually eligible for regional alliances.

The third step (loading the net premium for expenses, taxes, and margins) is described in sections 6, 7 and 8. The first part of the loading factor is for surcharges and assessments added by the Health Security Act. Loading of current expenses and taxes is explained in section 7. Changes from the current expense loadings are addressed in section 8.

The fourth step, which combines the first three steps to determine the gross premium, is basically an algebraic formula:

$$\frac{\text{(Base claim cost)} \times \text{(Adjustments)}}{1\text{-loading}} = \frac{\text{Net Premium}}{1\text{-loading}} = \text{Gross Premium.}$$

My objective was to develop a premium for the standard benefit package under the Health Security Act that was comparable to the

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Administration's premium estimates, as found on page 112 of *Health Security: The President's Report to the American People*.

In Table 2, my premium estimates for the Health Security Act are compared to the Administration's premium estimates and to premiums developed by Hewitt Associates which were presented in Congressional testimony.

Once I calculated premium estimates for the Health Security Act, I tested them for sensitivity to changes in specific assumptions (the fifth step above). Through sensitivity testing, I was able to determine how sensitive the premium estimates were to changes in the assumptions and how conservative my estimates were. The results of the sensitivity testing are discussed below and compiled in Tables 3 and 4.

Table 3 shows the resulting percentage change in premium for various changes in the rating assumptions.

Table 4 shows changes in specific assumptions that would result in a 1 percent change in the premium. For example, if the savings from uncompensated care were 10 percent less than expected, premiums would be 1 percent higher. Likewise, if Medicaid morbidity were 11 percent higher, premiums would be 1 percent higher.

Table 5 shows how the premium estimates would vary by state. These premiums are only for the high cost-sharing plan, however, so they may not be appropriate for comparisons in states with a high HMO penetration (market share). Actuarial judgment should be exercised when using these estimates in states with large HMO population/penetration.

Components of the premium, and the assumptions used in developing the HIAA estimate, are described in some detail in the numbered sections following the tables.

Table 2

Comparison of HIAA Premium Estimates for Health Security Act to Hewitt Associates and Clinton Administration Estimates

Single Person Premium

Assumptions	Single Person Premium	Compared to HIAA Estimate	Compared to Hewitt Associates	Compared to Administration
1. HIAA estimate for Health Security Act	$2,509	--	3%	30%
2. Hewitt Assoc. estimate for Health Security Act	$2,440	-3%	--	26%
3. Administration estimate for Health Security Act	$1,932	-23%	-21%	--

Two-parent Family Premium

Assumptions	Two-parent Family Premium	Compared to HIAA Estimate	Compared to Hewitt Associates	Compared to Administration
1. HIAA estimate for Health Security Act	$7,278	--	5%	67%
2. Hewitt Assoc. estimate for Health Security Act	$6,946	-5%	--	59%
3. Administration estimate for Health Security Act	$4,360	-40%	-37%	--

Sources: "Health Security: The President's Report to the American People," page 112 (Administration's estimates); Testimony before U.S. House Subcommittee on Health and the Environment of the Committee on Energy and Commerce, November 22, 1993 (Hewitt Associates' estimates); and HIAA

Table 3

Sensitivity Testing and Comparison of HSA Premium Estimates (Single Person Premium)

Assumptions	Single Person Premium	Compared to HIAA Estimate
1. HIAA estimate for Health Security Act	$2,509	0%
2. No change in distribution of policies by family status	$2,535	1%
3. Disregard Medicaid	$2,537	1%
4. Medicaid at 120% morbidity	$2,552	2%
5. Medicaid and uninsured at 120% morbidity (cost)	$2,632	5%
6. 25% fewer retirees (25% shifted to EEs @ EE cost)	$2,445	−3%
7. Lower retiree morbidity (50% of excess over EE)	$2,378	−5%
8. Lower retiree/indiv morbidity (50% less of excess)	$2,361	−6%
9. Lower retiree/indiv, higher Medicaid/unins (#5 & #8)	$2,484	−1%
10. Aggregate cost of migration reduced by 50%	$2,358	−6%
11. 1% higher claims	$2,533	1%
12. 5% higher claims	$2,630	5%
13. Lower, 7.5%, savings from uncompensated care	$2,582	3%
14. Lower, 5%, add−on for surcharges and assessments	$2,447	−2%
15. Lower, −0.9%, change in retention	$2,475	−1%
16. Higher, 1.2%, change in retention	$2,541	1%

Source: HIAA

Table 4

Changes in Assumptions for HSA Premium That Result in a 1% Change (Single Person Premium)

Assumptions	Single Person Premium	Compared to HIAA Estimate
1. HIAA estimate for Health Security Act	$2,509	0%
2. No change in distribution of policies by family status	$2,535	1%
3. Disregard Medicaid	$2,537	1%
9. Lower retiree/indiv, higher Medicaid/unins (#5 & #8)	$2,484	−1%
11. 1% higher claims	$2,533	1%
17. Medicaid at 111% morbidity	$2,532	1%
18. Medicaid and uninsured at 104% morbidity (cost)	$2,534	1%
19. 10% fewer retirees (10% shifted to EEs @ EE cost)	$2,483	−1%
20. Lower retiree morbidity (10% lower excess, 192%)	$2,483	−1%
21. Lower retiree/indiv morbidity (8% lower excess)	$2,485	−1%
22. Aggregate cost of migration reduced by 10%	$2,479	−1%
23. Savings from uncompensated care reduced by 10%	$2,534	1%
24. Additional 1% add−on for surcharges and assessments	$2,541	1%
25. Greater reduction in retention: 0.9% more	$2,481	−1%

Source: HIAA

Table 5

HIAA Estimate of Premium for Health Security Act by State *

STATE	GEOGRAPHIC FACTOR	SINGLE	COUPLE	SINGLE PARENT	TWO PARENT
ALABAMA	89%	$2,233	$4,823	$3,800	$6,477
ALASKA	120%	3,011	6,503	5,124	8,734
ARIZONA	96%	2,409	5,202	4,099	6,987
ARKANSAS	87%	2,183	4,715	3,715	6,332
CALIFORNIA *	145%	3,638	7,858	6,192	10,553
COLORADO	89%	2,233	4,823	3,800	6,477
CONNECTICUT	98%	2,459	5,311	4,185	7,132
DELAWARE	95%	2,384	5,148	4,057	6,914
DISTRICT OF COL	120%	3,011	6,503	5,124	8,734
FLORIDA	106%	2,660	5,744	4,526	7,715
GEORGIA	100%	2,509	5,419	4,270	7,278
HAWAI'I *	100%	2,509	5,419	4,270	7,278
IDAHO	85%	2,133	4,606	3,630	6,186
ILLINOIS	111%	2,785	6,015	4,740	8,079
INDIANA	84%	2,108	4,552	3,587	6,114
IOWA	82%	2,057	4,444	3,501	5,968
KANSAS	88%	2,208	4,769	3,758	6,405
KENTUCKY	84%	2,108	4,552	3,587	6,114
LOUISIANA	99%	2,484	5,365	4,227	7,205
MAINE	85%	2,133	4,606	3,630	6,186
MARYLAND	100%	2,509	5,419	4,270	7,278
MASSACHUSETTS *	105%	2,634	5,690	4,484	7,642
MICHIGAN	105%	2,634	5,690	4,484	7,642
MINNESOTA *	91%	2,283	4,931	3,886	6,623
MISSISSIPPI	86%	2,158	4,660	3,672	6,259
MISSOURI	86%	2,158	4,660	3,672	6,259
MONTANA	85%	2,133	4,606	3,630	6,186
NEBRASKA	82%	2,057	4,444	3,501	5,968
NEVADA	113%	2,835	6,123	4,825	8,224
NEW HAMPSHIRE	85%	2,133	4,606	3,630	6,186
NEW JERSEY	103%	2,584	5,582	4,398	7,496
NEW MEXICO	90%	2,258	4,877	3,843	6,550
NEW YORK	106%	2,660	5,744	4,526	7,715
NORTH CAROLINA	82%	2,057	4,444	3,501	5,968
NORTH DAKOTA	85%	2,133	4,606	3,630	6,186
OHIO	89%	2,233	4,823	3,800	6,477
OKLAHOMA	87%	2,183	4,715	3,715	6,332
OREGON *	88%	2,208	4,769	3,758	6,405
PENNSYLVANIA	90%	2,258	4,877	3,843	6,550
RHODE ISLAND	95%	2,384	5,148	4,057	6,914
SOUTH CAROLINA	82%	2,057	4,444	3,501	5,968
SOUTH DAKOTA	80%	2,007	4,335	3,416	5,822
TENNESSEE	89%	2,233	4,823	3,800	6,477
TEXAS	105%	2,634	5,690	4,484	7,642
UTAH	90%	2,258	4,877	3,843	6,550
VERMONT	80%	2,007	4,335	3,416	5,822
VIRGINIA	87%	2,183	4,715	3,715	6,332
WASHINGTON	87%	2,183	4,715	3,715	6,332
WEST VIRGINIA	86%	2,158	4,660	3,672	6,259
WISCONSIN *	85%	2,133	4,606	3,630	6,186
WYOMING	85%	2,133	4,606	3,630	6,186
U.S. AVERAGE	100%	2,509	5,419	4,270	7,278

* These premiums are for the high cost-sharing plan only. They may not be appropriate for comparisons in states with a high HMO penetration (market share). Actuarial judgment should be exercised when using these estimates in states with large HMO penetration.

Source: HIAA

Actuarial Memorandum
Premiums Under the Proposed Health Security Act
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DETERMINING THE BASE CLAIMS COST

1. Base claims cost. I developed the base claims cost for a single person from estimates from four commercial health insurance companies and one estimate I derived from the Tillinghast Group Rating Manual. The estimates were all based on the standard benefit package described in the 9/7/93 working-group draft (adjustments are made later for subsequent changes in the benefit plan) and the following assumptions:

- Precertification and concurrent review
- 12-month policy period beginning January 1, 1994
- No industry adjustment
- No COBRA, COB, or AIDS adjustments
- No geography (area) adjustment (i.e., claims costs are nationally representative)
- Standard room and board charges (semi-private)
- Census distribution similar to nonelderly U.S. population
- Guaranteed issue and mandated coverage
- Four-tier rating: single, couple, single-parent family and two-parent family
- Preexisting conditions covered
- No lifetime maximum

I averaged the estimates from the four commercial carriers and my estimate from the Tillinghast Group Rating Manual together to determine the average base claims cost for a single person under the proposed Health Security Act for each of the three standard benefit cost-sharing plans under the Act.

According to the Administration, the premium estimates presented with the proposed Health Security Act represent premiums related to the Act's high cost-sharing plan only. Therefore, only the premium estimates related to the high cost-sharing plan are presented in this memorandum.

Using data from the March 1992 Current Population Survey (CPS) regarding the distribution and average size of families currently insured (prepared for HIAA by Jack Rodgers of Price Waterhouse), and relative claims cost factors from the Tillinghast Group Rating Manual, I developed base claims costs for couples, single-parent families, and two-parent families using the expected claims cost for single persons.

The CPS average family size for all policies combined was 2.2 persons per policy. The average family size for a two-parent family was 4.0 persons. The average family size for a single-parent family was 2.8 persons.

The relative claims cost factors developed from the Tillinghast Group Rating Manual were:

(1) 1.00 for an insured;
(2) 1.16 for a spouse; and
(3) .39 for a child.

The rating factors (weights representing the ratio of the premium for a specific family status to the premium for a single person) derived from the combination of these average family size and relative claims cost factors were: 2.16 for couples, 1.70 for single parents, and 2.94 for two-parent families. The composite rating factor across all family status rating classes was 1.8.

The base claims costs developed using the above methodology and assumptions were:

Family Status	Base Claims Cost*
Single person	$1,927
Single-parent family	3,280
Couple	4,162
Two-parent family	5,665

(* See Appendix B, page 1.)

2. Adjustment in average claims cost for change in distribution of policies as a result of expanding to universal coverage. This factor corrects for the change in the average per capita claims cost that is a direct result of calculating a new weighted average claims cost when the mix of families is changed. (See Appendix B, page 2.)

After reforms, some individuals who are currently insured as single persons would become insured as part of a family under universal coverage, e.g., children and spouses that are not covered under an employee's policy would now be required to be covered. All family members would be on the same plan.

Uninsured single individuals and single-parent families would now be covered. These expansions of coverage and changes in family status are expected to alter the mix of policies by family status, but the average per capita claims cost should not change.

Not making this adjustment would artificially increase the estimated per capita claims cost and overstate premiums by about 1 percent of premium (Table 3, #2).

ADJUSTMENTS TO CLAIMS

3. Adjustment to claims costs for migration (as when early retirees, the unemployed, individually insured, Medicaid recipients, and the uninsured join the Regional Health Alliance and are pooled with the current employer-sponsored pool after reform). The proposed Health Security Act calls for establishment of Regional Health Alliances that would add at least four classes of insureds to the current employer-sponsored pool of insureds:

(1) Early retirees and unemployed persons currently covered under their prior employer's health plan,
(2) Persons covered under individual health insurance,
(3) Medicaid recipients, and
(4) The uninsured.

Using a distribution of the population by insured status from the March 1992 CPS and relative morbidity statistics (ratio of health care cost and utilization for each insured class to the cost and utilization of the active employee class), I determined a weighted average of the morbidity in the pool after the four classes were added to the active employee pool. (Appendix B, page 3.)

I split the employer-sponsored pool into two groups: the active employee pool and the retiree/unemployed pool. I did this for two reasons. First, the morbidity of the two classes is significantly different. HIAA research shows that health care expenditures are very similar for active employees and their dependents across all employer sizes. This is especially true after risk adjusting for health status of insureds by size of employer. However, health care expenditures of retirees and unemployed persons, and their dependents, who are still covered under a prior employer's health plan are very different from those of active employees and their dependents. Second, early retirees and unemployed persons are usually covered by large employers, not small employers. Most employees who are being pooled in the regional alliance work for employers with fewer than 100 employees, i.e., small employers. So the majority of the pool we are going to be expanding will be a pool of active employees and dependents from small employers. Their cost (morbidity) is indicated best by the cost and utilization of an active employee pool. This is also the reason why the active employee pool is set as the standard with a relative morbidity of 1.00 or 100 percent.

I derived relative morbidities for the early retirees and persons with individual insurance from the relative morbidity of these

populations in the 1987 NMES. Compared with the active employee population, the morbidities for these classes of insureds were 202 percent and 122 percent of the active employee pool, respectively.

The relative morbidity for Medicaid was assumed to be 100 percent, meaning that its cost is the same as that of active employees. This was one of the most difficult assumptions I had to make. In work done in conjunction with Price Waterhouse, I established that demographically, and on a risk-adjusted basis using a crude medical conditions risk adjuster, the Medicaid population should have a relative morbidity that is less than the active employee population. Countering my finding is Health Care Financing Administration (HCFA) and Medicaid data that indicate Medicaid enrollees--especially the cash recipients, who are the majority of Medicaid recipients--have an average claims cost that is significantly higher than active employees' claims cost. However, looking at current Medicaid experience to discern the future morbidity of Medicaid recipients can be misleading.

First, in this analysis I am assuming a mature market after reforms have been implemented. Just as I am assuming that all migrations and enrollment shifts have taken place to reach universal coverage--an event that will likely take several years --I had to look at the Medicaid costs in a mature market, after any initial high utilization periods might have passed.

Second, current Medicaid coverage does not include cost sharing. While many recipients would still have subsidies that cover much if not all of their cost-sharing obligations, some will not, and this will reduce utilization for recipients who would now have to make copayments.

Third, current Medicaid benefits are significantly different from the standard benefit package being proposed, especially regarding long-term care. This reduction in benefits will reduce costs.

Fourth, providers (for the most part) would be reimbursed for Medicaid patients at the same rate as they would be for non-Medicaid patients. (Although there would be some cost-sharing reductions that health plans may be required to "forgive.")

For all these reasons, I believe that the relative morbidity of the Medicaid population should not be any more than the average morbidity of the active employee population. Since this is a very uncertain assumption, however, I sensitivity tested for higher levels of morbidity.

For sensitivity testing, I developed a premium using a Medicaid morbidity rate of 120 percent, or 20 percent worse than the morbidity of the active employee population. The resulting premium was 2 percent higher than the best estimate, which used Medicaid morbidity of 100 percent (Table 3, #4). I also determined what the premium would be if there were no Medicaid recipients--as a sensitivity test. The resulting premium increased 1 percent over the best estimate (Table 3, #3).

For some of the same reasons, I assumed the relative morbidity of the uninsured was 100 percent of active employees' morbidity. This is clearly a much more conservative assumption for the uninsured than for the Medicaid population.

First, the RAND Health Insurance Experiment demonstrated that even three years after previously uninsured groups are insured (except for a short increase in mental health utilization in the first year), the previously uninsured were still utilizing services at a lower rate than the average insured population.

Second, although there is a greater percentage of high risk individuals among the uninsured than the insured population, the remainder of the uninsured are very low risks--over a quarter are children--offsetting the increased cost from the high-risk uninsured.

The United States Agency for Health Care Policy and Research (AHCPR) conducted a study of uninsured individuals who had either been denied insurance or had their coverage limited (such as through a waiver or preexisting condition exclusion) and found that only a little more than one-third of the uninsured had ever tried to get private coverage, and only about 2.5 percent had ever been denied coverage or had their coverage limited.

Research conducted by HIAA has shown that, on a risk-adjusted basis, the average risk of the uninsured is slightly less than that of the active employee pool.[2] Still, to be conservative, I tested sensitivity of the premium estimates to this assumption at the 120 percent morbidity level by developing a premium assuming both the uninsured and Medicaid populations had morbidity of 120 percent. The resulting premium was 5 percent higher than the best estimate (Table 3, #5).

[2] Methodology for study is described in a September 3, 1993, memo from Tony Hammond to various researchers/actuaries on *Relative Risk of Population by Insured Status*.

Coincidentally, the Hewitt Associates' model uses a morbidity level of 120 percent of an insured large employer population (which includes some retirees) both for Medicaid recipients and for the uninsured. The Administration also uses levels of morbidity for these populations higher than 100 percent.

To test the sensitivity of the premium estimates to other migration assumptions, some additional estimates were made with varying assumptions:

- If the number of retirees/unemployed were 25 percent lower (the 25 percent is shifted to the active employee pool), the resulting premium would be 3 percent lower than the best estimate (see Table 3, #6).

- If the excess retiree morbidity (the amount by which the morbidity exceeds 100 percent) were reduced by 50 percent from 202 percent to 151 percent, the resulting premium would be 5 percent less than the best estimate (Table 3, #7).

- If the excess morbidity for both retirees and the individually insured were reduced by 50 percent, the resulting premium would be 6 percent less than the best estimate (Table 3, #8).

- If the excess morbidity for both retirees and the individually insured were reduced by 50 percent, and the uninsured and Medicaid populations had morbidity of 120 percent, the resulting premium would be 1 percent lower than the best estimate (Table 3, #9).

- If the aggregate cost of migration were reduced by 50 percent, the resulting premium would be 6 percent lower than the best estimate (Table 3, #10).

4. Reduction in cost shifting. This assumption is to reflect the reduction in costs that will occur when universal coverage is implemented and providers no longer have to overcharge their paying patients to cover the costs of underpaying or nonpaying patients. In effect it is a reduction in cost shifting, or, more accurately, it is a savings resulting from a reduction in uncompensated care costs for providers that gets passed along to insurers through lower health care costs.

Unfortunately, however, all cost shifting or uncompensated care--about 15 percent of claims cost--does not disappear. Medicare discounting, underpayment of premiums for Medicaid recipients, uncompensated care related to undocumented workers, and bad debt will still occur. The cost shifting will just be greatly

reduced--except for Medicare cost shifting. The cost shift to private payers from Medicare is likely to continue. It is also questionable whether every dollar of reduction in cost shifting translates into a dollar of savings in premiums. Prior experience indicates that it is far more likely that only about half of these "savings" would materialize--7.5 percent of claims costs.

The Administration assumes a 10.5 percent "savings" from a reduction in uncompensated care. For conservatism, the assumption I used in the best estimate was the Administration's figure of 10.5 percent. For sensitivity testing, I used an assumption of 7.5 percent. The resulting premium was 3 percent higher.

5. Additional benefits in HSA. This adjustment reflects the increase in claims cost necessary to cover the expanded benefits included in the proposed Health Security Act that were not included in the Administration's 9/7/93 working-group draft. For example, preventive benefits were expanded to include periodic clinician visits for adults without cost-sharing. In discussions with the company actuaries who submitted cost estimates for my analysis and other actuaries, we decided that the new benefits added about 2 to 4 percent of additional claims cost.

The impact on premiums of having claims costs that are 1 or 5 percent higher was tested. As expected, premiums were 1 or 5 percent higher than the base, respectively (Table 3, #11 & #12).

ADJUSTMENTS TO NET PREMIUM (LOADING)

6. Surcharges and assessments. This adjustment to the premiums reflects direct additions to premiums, calculated as a percent of claims. This adjustment includes but is not limited to surcharges and assessments for:

- Guarantee fund assessments
- Surcharge for academic health centers
- Surcharge for graduate medical education
- Assessments for regional alliance's bad debt

This adjustment also includes additional margins needed as a direct result of the proposed Health Security Act. These margins include but are not limited to margins for:

- Contingency reserve for costs of Workers Comp and Auto
- Contingency reserve for underestimation of new expenses
- Uncertainty in pricing for universal coverage
- Uncertainty in pricing for expanded benefits
- Uncertainty in enrollment projections

- Medicaid underpayments
- Regional Health Alliance underpayments
- Uncertainty of risk adjustment mechanism
- Litigation costs resulting from reform

These adjustments could add 2 to 4 percent for the surcharges and assessments and another 3 to 5 percent, at least, for the additional margins. Taking the midpoint of both of these ranges, the best estimate assumption I used was 7 percent.

This assumption was sensitivity tested by using a 5 percent assumption, resulting in a premium that was 2 percent lower than the best estimate premium (Table 3, #14).

I included under changes in the expense ratio (in section 8 below) the addition to premiums for an alliance's administrative costs and the additional expenses related to reporting and compliance requirements.

7. Current expense ratio. This factor reflects the current combined operating expense ratio for group and individual business of 13.2 percent of premium.

This level of expense is distributed by type of expense as follows (from a preliminary HIAA study):

Claims administration, Plan administration, and Sales	11.1%
Risk/profit	1.5%
State tax	1.8%
Federal tax	0.8%
Net inv. inc.	-2.0%
Total	13.2%

It is also distributed by size of employer (number of employees) as follows (from a preliminary HIAA study):

		Expense	Pop
Group--95.2% of market			
	Less than 25 EEs	25%	15%
	25 to 99 EEs	18%	10%
	100 to 499 EEs	14%	20%
	500 to 2499	8%	30%
	2500+	6%	25%
Individual--4.8% of market			
	Individually insured	32.6%	100%
	Composite	13.2%	100%

These estimates are national averages; the expense ratios of actual insurers and employers would depend on their specific circumstances.

8. Changes in Expense Ratio. This adjustment reflects administrative cost savings to insurers from using purchasing alliances and electronic claims submissions. It also reflects increases in administrative costs for purchasing alliance administration, new data reporting and compliance requirements, expanding coverage, and converting coverage for all self-insured employers with fewer than 5000 employees to fully insured, fully reserved policies.

The distributions above reflect the expense ratio for a mix of business that includes self-insured business as well as fully insured business, and expenses for all sizes of employers (ERs), including those with more than 5000 employees.

The first step is to adjust the distribution of expenses by size of employer to exclude employers with over 5000 employees. This adjustment needs to be done for the distribution above (which includes self-insured business) and for a distribution of expenses on a fully insured basis (because the adjusted expense ratio will fall somewhere between these two levels).

	% of Employees		Conditional
Employer size	All ERs	<5000	Distribution
Less than 25 EEs	14.3%	14.3%	16.7%
25 to 99 EEs	9.5%	9.5%	11.1%
100 to 499 EEs	19.0%	19.0%	22.2%
500 to 2499	28.6%	28.6%	33.3%
2500 to 4999	9.5%	9.5%	11.1%
5000+	14.3%		
Individually Insured	4.8%	4.8%	5.6%
Composite	100.0%	85.7%	100.0%

The first numerical column in the table above is the distribution for all employers. The second column is the distribution without employers with more than 5000 employees. The last column is the conditional distribution of employers with less than 5000 employees and individual insureds. This distribution can then be used to weight the distribution of administrative cost by size of employer using current expense ratios and expense ratios for fully insured business only.

Employer size	Expense Ratio Current	Fully-Insd	Conditional Distribution
Less than 25 EEs	25%	25%	17%
25 to 99 EEs	18%	18%	11%
100 to 499 EEs	14%	16%	22%
500 to 2499	8%	13%	33%
2500 to 4999	6%	10%	11%
Individually Ins'd	32.6%	32.6%	6%
Composite	14.6%	17.1%	100%

This implies that eliminating employers with more than 5000 employees and eliminating self-insurance for the remaining employers would result in administrative costs between 14.6 percent and 17.1 percent.

The next adjustment reflects the administrative savings gained by using electronic claims submission and regional alliances.

	Before	After	Best Estimate
Claims administration,	11.1%	3.5%	3.5%
plan administration,		2.5%	2.5%
and sales		.5%	.5%
Risk/profit	1.5%	0 to 1.5%	1.5%
State tax	1.8%	1.8%	1.8%
Federal tax	0.8%	0 to .8%	.8%
Net investment income	-2.0%	-2.0%	-2.0%
Subtotal	13.2%	6.8% to 9.1%	8.6%
Plus 1% for compliance with new reporting requirements and regulations.			1.0%
Plus .5% to 2.5% for administrative costs for the operation of the regional alliance.			1.5%
	GRAND TOTAL		11.1%

This level of expense may seem higher than expected because of the additional 2.5 percent of expenses added for compliance and alliance administrative costs, and because the administrative cost of fully insuring and fully reserving groups is higher than the current administrative cost for large groups.

The next adjustment combines the change in the administrative cost by type of expense with the change in the administrative cost by size of employer. Since the reduction in the administrative cost by type of expense reduces the composite expense ratio by 16 percent, from 13.2 percent to 11.1 percent (i.e., 11.1/13.2 = .84), the same reduction can be applied to the composite costs by size of employer. Applying this adjustment reduces the range for the composite expense ratio to a range from 12.3 percent (.84 x .146 = .123) to 14.4 percent (.84 x .171 = .144). The midpoint of this range is 13.4 percent and is the assumption I used to determine the best estimate.

This level of administrative cost is slightly higher than the current level of 13.2 percent of premium. Sensitivity tests were done at the low estimate of 12.3 percent of premium (-0.9 percent change in expense ratio) and at the high estimate of 14.4 percent of premium (1.2 percent change in expense ratio) (Table 3, #15 and #16).

RESULTS OF SENSITIVITY TESTING

While much of the results of sensitivity testing are discussed in the numbered sections above, this section summarizes the results.

The assumptions that are the most likely to be different from what I assumed and to which my premium estimates are the most sensitive are:

- The base claims cost. A 1 percent change in premium will result from a 1 percent change in the base claims cost.
- The level of surcharges or assessments. A 1 percent change in premium will result from a 1 percent change in the level of surcharges or assessments. This would also be true for any premium taxes or operating costs that are explicitly defined as a percentage of gross premium.
- Savings from uncompensated care. A 1 percent change in premium will result from about a 2.5 percent change in the expected savings from uncompensated care.
- Morbidity level of the uninsured and Medicaid recipients combined. A 1 percent change in premium will result from about a 4 percent change in the morbidity level of the uninsured and Medicaid recipients combined.

- Aggregate cost of migration. A 1 percent change in premium will result from about an 8 percent change in the aggregate cost of migration.

- Number or morbidity of retirees. A 1 percent change in premium will result from a 10 percent change in the number or morbidity of retirees.

- Morbidity of Medicaid recipients. A 1 percent change in premium will result from a 10 percent change in the morbidity level of Medicaid recipients.

One of the assumptions to which premiums are not very sensitive is the change in distribution of policies by family status. Even if I did not make this adjustment, premiums would only change by 1 percent.

PROVISIONS AND REFORMS NOT QUANTIFIED

The number and complexity of health care reform proposals has greatly outstripped the available data, and the proposed Health Security Act (H.R. 3600; S. 1757) is no exception. Consequently, it was impossible to quantify certain provisions in the proposed Health Security Act. In some cases more research needs to be done and could be done if the necessary data were obtained. In other cases, the data are not available to credibly estimate the impact of certain reforms on the market.

Some of the provisions that would have a significant impact on premiums but are not specifically quantified in the preceding analysis are:

- Medicare enrollees joining Regional Health Alliances (especially those who are employed);

- Employers with more than 5000 employees joining Regional Health Alliances;

- Insurance reforms other than guaranteed issue and renewal, community rating, risk adjustment, and mandated/universal coverage;

- The impact of COBRA eligibles;[3]
- Multiple-earner families;[4]
- Efficacy of the universal coverage requirement;[5]
- Additional cost for point-of-service; and
- Induced retirement.[6]

All of these provisions would tend to increase rates.

No specific attempt was made to measure the proposed Act's effect on the solvency of employers and insurers.

The impact of state laws and regulations already promulgated could not be included in this study.

The scope of this study was limited to an analysis of the 1994 premiums released with the proposed Health Security Act. Some covariant effects could not be analyzed with the data available, for example, how geographic factors might change in the absence of other risk classification factors.

[3] We can expect individuals leaving corporate alliances with COBRA premiums higher than the rates in a regional alliance to purchase coverage through the regional alliance, while those for whom rates under COBRA are lower will not do so. This creates an antiselection issue that is not addressed by the proposed Health Security Act.

[4] When one worker is eligible for coverage through a corporate alliance and another family member is eligible for coverage through a regional alliance.

[5] Even in Hawai'i universal coverage is not universal. Trying to get the last 1 percent enrolled can be very expensive.

[6] Individuals deciding to take early retirement now that the Health Security Act guarantees them health coverage paid for by the government and their employer.

COMMENTS FROM REVIEWERS

An initial draft of this memorandum was distributed to about two dozen interested actuaries and researchers for peer review.[7] I received responses from about half of them. Their comments and concerns are discussed below.

The previous section on provisions not quantified, which was not included in the initial draft, was added to respond to comments I received questioning whether certain issues were included in my analysis.

One reviewer asked why changes in the mental health and substance abuse benefits didn't reduce premiums between the September 7th working group draft and the proposed Health Security Act released in October.

> Some differences between the benefits outlined in the 9/7/93 draft and the proposed Health Security Act reduced premiums, while others increased premiums. Estimates using actual rate manuals showed some, but little, change between the cost of benefits outlined in the September 7th draft and the cost of benefits under the proposed Health Security Act, released in October. In discussions with company actuaries, the different benefits described in the Health Security Act added about 2 to 4 percent to the claims cost--and to the premiums.

One reviewer questioned why one estimate of the base claims cost was so much lower than the other four estimates.

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[7] I am indebted to the following people for reviewing this memorandum and/or providing me with their comments:

Karen Bender, Employers Health
Cecil Bykerk, Mutual of Omaha
Sanford Herman, The Guardian
Leonard Koloms, Benefit Trust
Bill Lane, Mutual of Omaha
Jeff McDaniel, Nationwide
Mike O'Grady, Congressional Research Service
Jack Rodgers, Price Waterhouse
Maleta Simek, Celtic Life
Chuck Smith, The Principal
Bill Weller, Health Insurance Association of America

Obtaining a good estimate for base claims cost was one of my primary concerns from the very beginning. Experience of a single carrier is not necessarily credible. In order to address this problem, estimates were sought from a dozen companies of which only four responded. The four companies that responded have a diverse mix of business. However, as a reasonability check because of the small sample size, I prepared a separate estimate of expected claims cost from the Tillinghast Group Rating Manual and adjusted this estimate to match current national per capita claims cost trended forward to 1994. The estimate I produced in this manner was very close to three of the four estimates I received, giving me greater confidence in the higher estimates. As a last step, all five estimates of base claims cost were averaged together and the implied per capita claims cost was checked against nationally representative data for reasonability.

One reviewer questioned why I used a child claim cost factor that was so low. He believed a factor of around 60 percent of primary insured claims cost would be more appropriate.

This is a fair comment. The range of estimates I found for the child claim cost factor was from 39 percent to about 60 percent of the primary insured claims cost. Hewitt Associates used 50 percent for its estimates.

When I sensitivity tested this assumption, there was some, but not a large difference in the premium estimates generated by using either 39 percent or 60 percent. Since the Administration's estimate of the family premium was considerably lower than my estimate and since there was not a lot of change in the final premiums in spite of which factor I used, I decided to use the smaller factor to be more conservative (i.e., to not accentuate the differences between our two estimates without good cause).

The same reviewer questioned my assertion that Medicaid cost shifting would continue after the Health Security Act was enacted.

This is not a material assumption (no numerical factors are based on this assertion, so it would not change my estimate of the premium one way or the other). However, the proposed Health Security Act does establish premium discounts for Medicaid patients and requires health plans to "forgive" some cost sharing obligations of Medicaid cash recipients.

When this occurs, costs can be expected to be shifted to other patients/insureds.

One reviewer pointed out that state-by-state estimates that were prepared using premium estimates for the high cost sharing plan, population figures, and area rating factors from the Tillinghast Group Rating Manual would not be appropriate for states with large populations and large HMO/managed care enrollment. In his opinion, the premium estimates I developed by state, which are listed in Table 5, would not be appropriate for states with greater than 25% HMO/managed care penetration, e.g., California.

I believe this is a legitimate concern for states with a large HMO penetration (market share), but not necessarily states that have a large HMO population that is not a large percentage of the state population. The risk adjustment mechanism and lower cost-sharing for managed care plans will ameliorate some of this problem. However, these provisions will not adjust for all of the difference because only part of the difference is due to risk and cost sharing. Some of the difference is because the area rating factors are based on indemnity plans alone. Unfortunately, area rating factors by state that would be appropriate for all states, with their different levels of managed care, are not available. In spite of this limitation, the premium estimates by state are useful for comparing most states and may be useful for making comparisons to state-specific premium estimates for the Health Security Act for high cost-sharing plans. A note was added to Table 5 identifying this concern.

The same reviewer also felt that reductions in claims cost resulting from provider negotiations should be reflected in the claims cost estimates or adjustments to claims costs.

While I would like to be able to score competitive market adjustments such as this, there is insufficient evidence for doing so. Some researchers and actuaries argue that discounts in one market segment just lead to cost shifts to other market segments. Others argue that gains are more due to biased selection than to discounts and cite evidence to support this. In the end, after risk adjustment, the real reductions in claims cost may actually just reduce trend increases in future years, not reduce the base claims cost (especially not for 1994). Further, I believe that I have already reduced the base claims cost more than enough by using the Administration's adjustment for uncompensated care. I don't believe it is necessary to add an additional

explicit reduction for this factor because it may or may not occur and may already be reflected by my conservative estimates.

A couple of reviewers felt that the morbidity assumption used for Medicaid recipients was too low.

This could have a material effect on my estimates, but it would only serve to widen the difference between my estimates and the Administration's. I believe that my approach, explained in section 3, is reasonable for the rating methodology I have used. In order to address the concerns of the reviewers, however, I have sensitivity tested this assumption at a morbidity level of 120% of the active employee morbidity. At this morbidity level for Medicaid recipients, premiums would only be 2 percent higher.

Another reviewer questioned my assumptions for the morbidity and number of retirees, pointing this out as a significant discrepancy between my approach and the Administration's.

It is difficult to reconcile my estimates to the Administration's because our approaches are quite different. It is quite possible that our two approaches could be reconciled and would prove to be similar, but it was not possible to do so without being allowed to go into greater detail with the Administration's actuaries.

Even though the number and morbidity of early retirees cannot be reconciled with the Administration's estimates, I believe the assumptions I used for both of these factors are consistent with each other. I used a larger population that included unemployed persons covered by their previous employer mixed in with the early retirees covered by their previous employer. The morbidity factor I used is appropriate for this population which is unemployed and early retirees mixed together.

Several reviewers felt that it was more appropriate to build national data up from rate manual data as I have done rather than from national health expenditure data as the Administration has done, while a few reviewers had concerns about reconciling both approaches.

Theoretically, what I am trying to estimate could best be described as a national average rate manual. If I had perfect data for building a national average rate manual

from either insurer rate manual data or national health expenditure data, the end result should be the same. Thus, reconciling the two approaches becomes problematic only when we don't have perfect data and, thus, don't get to similar results. I believe that working with real claims data and the adjustments to rate manual data is more credible, reliable, and unbiased than starting with national health expenditure data and trying to adjust it to develop a national rate manual.

On a related subject, several reviewers and I discussed whether the rates for all adults should be the same or not.

Generally, a rate manual approach calls for developing a rate or factor for primary insureds, spouses, and children (adult males, adult females, and children) and building rates for each family category by using these factors. In this case, the rate for single insureds would be the rate for primary insureds. Likewise the rate for couples would be the sum of the rate for insureds plus the rate for spouses. And so on.

An alternative would be to treat all adults the same and only produce an adult rate and a child rate. Then the single insured rate would be the same as the adult rate, and the couple rate would be twice the adult rate.

Another alternative would be to segregate the claim costs by type of family and calculate a premium for each family type separately. In this case, the rate for single insureds would be the total claims and expenses for single insureds divided by the number of single insureds. The rate for couples would be the total claims and expenses for couples divided by the number of couples. The rate for two-parent families would be the total claims and expenses for these families divided by the number of two-parent families.

One of the big differences between the Administration's estimates and my estimates relate to these three approaches. I used the first approach because it is most appropriate for a rate manual approach. The Administration, in the proposed Health Security Act, implicitly requires using the second approach when it requires the couples' rate to be twice the single insured rate in a pure community-rated environment. This second approach would also be consistent with a rate manual approach and community rating.

In the Administration's development of premium estimates, a variant of the third approach is used. However, the third approach is inconsistent with its stated policy and proposed Health Security Act because it doesn't charge every adult the same rate.

The third approach is also inconsistent with pure community rating because it is quite possible that the reason the costs for adults in two-parent families are lower than the cost for adults that would be purchasing single and couple policies is because the adults in two-parent families are younger, on average.

One reviewer commented on the current distribution of expenses by type of expense (before reform) and suggested that a change be made in the table to make it more accurate.

I made the change suggested. It did not have a material effect on the aggregate expense levels or my premium estimate.

One reviewer asked whether the adjustment for surcharges and assessments was too high because it included surcharges for graduate medical education and academic health centers when these costs are already reflected in current claims costs.

Theoretically, this would be true. In practice, there are two reasons why I still think this provision increases costs rather than just moves the same dollars from being in the claims cost to an explicit surcharge.

First, the higher costs that academic health centers and graduate medical education add to current health care costs are not easily quantified. It may be higher or lower than the anticipated surcharges. Whatever it is, if it is less than the surcharge, it will likely grow to be as large as the surcharge as soon as these funds are available.

Second, if these additional funds become available for education and health centers, it is unlikely that these funds will just be used to offset current sources of funding. We may see cost and utilization trends reduce a little in the future, but that would not reduce the current level or distribution of costs. It is far more likely that the current sources and level of financing will continue and the new funds will be used to increase spending in these areas. What happened to health care spending following the introduction of Medicare is a perfect example of this.

CONCLUSION

First, even without adjusting for benefit differences that would only exacerbate the difference, the Administration's premium estimates for the proposed Health Security Act are already at or less than the average employer premium in 1991, based on HIAA's Employer Survey. Second, from 1991 to 1994, health care cost and utilization (growth) trends, while slowing, have still sustained rates of growth that are considerably higher than inflation. For these three years combined, a health care trend of about 33 percent would not be unreasonable. Third, in the Administration's proposed Health Security Act, any reductions or cost savings are more than offset by expansions of benefits, expansions of coverage and new reporting/compliance requirements. Since any potential reductions in costs are more than offset by increases in costs, it is unlikely that a premium less than currently expected 1994 rates would be reasonable. Reforms would only have the potential of decreasing future rate increases. Consequently, there is no doubt that the Administration's estimates are understated. The only question is: By how much? Taken all together, this would indicate that the Administration's estimates are understated by at least one-third: i.e., the health care trend from 1991 to 1994.

Not all of the Administration's estimates are one-third lower than mine. The rate for single parents is 9 percent less than mine. The two-parent family rate is 40 percent less. In aggregate (a weighted average of its premium estimates by type of family compared to a weighted average of my premium estimates), its premiums are about one-third too low.

The fact that Hewitt Associates also found the Administration estimates to be about 25 percent understated is confirming.

There is a much greater difference between the Administration's two-parent family rate and my two-parent family rate than there is between our other rates. This is also true for Hewitt Associates' rates. I believe this discrepancy arises because of an inconsistency between the legislative language and the Administration's rating methodology. As a result, the Administration's two-parent family premium is only 2.3 times its single person rate. A more reasonable multiplier might be about three times the single rate.

Most of the differences between the Administration's estimates and my own can probably be attributed to different assumptions regarding: the cost of including people not covered by health insurance (the uninsured), the cost of including early retirees

and Medicaid recipients in the regional alliances, and operating costs (including assessments and surcharges). There is also a significant difference in how claims costs are distributed by type of family. Some of these differences increase premiums while others reduce premiums. The net effect of all of the differences leads to premiums that are on-third less than my estimates.

However, it is very difficult to compare assumptions and methodologies in order to identify differences between my rating methodology and the Administration's since the Administration has not released an actuarial opinion and an actuarial report. An actuarial opinion would establish that a qualified actuary has looked at the assumptions used to develop the Administration's premiums and deemed them to be reasonable and a fair representation of the expected cost of the Administration's standard benefit plan. An actuarial report would clearly identify the assumptions and reasoning that went into reaching that actuarial opinion so that an independent actuarial review of the Administration's methods and assumptions could be conducted by other actuaries.

Obvious questions arise from these findings. If the Administration's premium estimates are one-third too low:

1. What does this mean for the Administration's estimates of subsidies for low-income persons and employers?

2. Will a larger proportion of the population pay more for health insurance after reforms than the Administration has estimated?

3. What would happen if the Administration's estimates were used as the basis for its proposed premium caps?

The premium estimates I have developed using the methodology described above are reasonable and are appropriate for comparison to the premium estimates the Clinton Administration presented with the proposed Health Security Act.

This opinion is limited by what is known about the assumptions the Administration used in developing its premium estimate and the provisions of the proposed Health Security Act (released in October 1993). If these were to change, my estimates and comparisons might also be different.

P. Anthony Hammond

P. Anthony Hammond, ASA, MAAA

Appendix A

Comparing the HIAA premium estimates to the:

Administration's premium estimates:

- The HIAA premium estimates are 30 to 67 percent higher than the Administration's.

  Compared to the Administration's estimates of $1,932 annually for a single person and $4,360 for a two-parent family, HIAA's estimates are 30 percent and 67 percent higher, respectively. This would imply that the Administration's estimates are understated by 23 and 40 percent, respectively, (or about one-third) compared to our estimates.

  Not all of the Administration's estimates vary from HIAA's estimates so much. The rate for single parents is only 9 percent lower than ours.

- Most of the differences between the Administration's estimates and HIAA's can probably be attributed to different assumptions regarding:

  (1) The cost of including people not now covered by health insurance (the uninsured);

  (2) The cost of including early retirees and Medicaid-eligibles in the regional alliances;

  (3) Operating costs (including assessments and surcharges); and

  The Administration uses a 15% load while we used a 20.5% load. The proposed Health Security Act adds an additional 7% load to current operating costs of about 13% of premium.

  (4) A difference in how claims costs are distributed by type of family.

  Some of these differences increase premiums and some reduce premiums. The net effect of all of the differences leads to premiums that are one-third less than HIAA's estimates.

- While there are differences in some of the other assumptions mentioned above, the Administration's estimate of base claims costs appears to be very similar to ours.

Hewitt Associates' premium estimates:

- The HIAA premium estimates are 3 to 5 percent higher than the Hewitt Associates' estimates.

  Compared to the Hewitt Associates' estimates of $2,440 annually for a single person and $6,946 for a two-parent family, our estimates are only 3 and 5 percent higher, respectively. This is well within a reasonable level of difference.

  Hewitt's Congressional testimony on its estimates also states that "the cost of the standard benefit package would be about 5 percent higher in 2001 than the initial package because of scheduled changes under the Health Security Act for added mental health benefits and adult dental [benefits]." This would put its estimate even closer to ours.

- Although the Hewitt and HIAA estimates are very close in aggregate, there are still differences in the specific assumptions we used. The differences between the Hewitt Associates' estimates and ours can be attributed to different assumptions regarding:

  (1) The cost of early retirees, Medicaid and uninsured persons joining the regional alliances;

  (2) Operating costs (they used 10 percent);

  (3) The demographic composition of U.S. population (this has very little impact on rates in aggregate);

  (4) A major difference in recognition of the savings from uncompensated care (and elimination of Medicaid cost shift); and

  Hewitt used a 1.5 percent reduction for savings from uncompensated care and a 3.5 percent reduction for elimination of Medicaid cost shift.

  The HIAA estimates are based on the Administration's assumption of a 10.5 percent savings from uncompensated care (for conservatism) but don't explicitly recognize any reduction for elimination of Medicaid cost shifting.

  Hewitt's assumptions for uncompensated care and Medicaid cost shifting make Hewitt's premiums 5.5 percent lower than HIAA's. Hewitt's assumption for the cost of the uninsured and Medicaid joining the regional alliances raises premiums about 6 percent. So the two

assumptions almost offset each other when comparing them to HIAA's premiums.

(5) A different relative claims cost factor for children that makes the HIAA single-parent rate less than the Hewitt single-parent rate while all other HIAA rates are slightly more than the Hewitt rates.

Hewitt uses a child factor of 50 percent of primary insured claims while HIAA uses a factor of 39 percent.

Lewin-VHI's premium estimates:

- The Lewin-VHI premium estimates cannot be directly compared to our estimates, the Administration's estimates or Hewitt Associates' estimates.

  The Lewin estimates are for 1998, whereas the other estimates are for 1994. Lewin's premiums are for all standard benefit plans while the Administration and HIAA estimates are for the high cost-sharing plan only. Lewin also makes the unreasonable assumption in developing its premium estimates that cost controls will be 100 percent effective.

- Some reports have indicated that the Lewin study validates the Administration's figures. This is simply not the case. Even if the Administration's premium estimates are only 17 percent too low as the Lewin study suggests, this would represent about one sixth of the non-Medicare health care costs in the United States--or about $100 billion. A discrepancy of that size hardly classifies as a validation.

Appendix B

Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

1. Base Claims Cost–high cost sharing (based on benefits in 9/7/93 draft)

Estimated Claim Cost	Single $1,927	Two parent $5,665	Single Parent $3,280	Couple $4,162	
Carrier A	$1,920		Relative Claims		
Carrier B	$2,000		Cost Factors:		
Carrier C	$1,739		1.00 insured		
Carrier D	$1,989		1.16 spouse		
HIAA (est.)	$1,987		0.39 child		
Average	$1,927				Total
Policies(mil's)	28.7	15.8	10.4	9.2	64.1
Frequency	44.8%	24.6%	16.2%	14.4%	100.0%
Family size	1.0	4.0	2.8	2.0	2.2
Rating factor	1.00	2.94	1.70	2.16	1.8

Sources: HIAA member companies, Tillinghast Group Rating Manual, and Price Waterhouse tabulations of March 1992 CPS

Premiums in Regional Health Alliances Under the Clinton Administration's Proposed Health Security Act

2. Adjustment to Average Claims Cost for Change in Distribution of Policies as a Result of Extending Coverage to Universal Coverage

Claims cost	$1,927	$5,665	$3,280	$4,162	3388.8
Family size	1.0	4.0	2.8	2.0	2.2
Current claims cost per capita					$1,558
After Reforms:					
Policies	48.3	26.5	11.2	17.2	103.2
Frequency	46.8%	25.7%	10.9%	16.7%	100.0%
Family size	1.0	3.9	2.8	2.0	2.2
Rating factor	1.00	2.90	1.70	2.16	1.8
Claims cost	$1,927	$5,590	$3,280	$4,162	3387.0
Claims cost per capita with new distribution					$1,575
Adjustment for change in distribution of policies					0.989

Sources: HIAA member companies, Tillinghast Group Rating Manual, and Price Waterhouse tabulations of March 1992 CPS

Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

3. Adjustment to Claims Cost for Migration (for early retirees, unemployed, Medicaid, uninsured)

Nonelderly (by Insured Status)	Percent of Population*	Relative Morbidity**
Employer Sponsored		
Employed	57.6%	100%
Early Retiree/Unemployed	10.6%	202%
Other Privately Insured	6.4%	122%
Medicaid	8.8%	100%
Uninsured	16.6%	100%
	100.0%	112%

* Source: HIAA tabulation based on March 1992 Current Population Survey and HIAA Source Book.

** Source: HIAA and Mathematica calculations from 1987 National Medical Expenditure Survey

Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

4. Other Adjustments to Claims Cost

a. Reduction in cost shifting	−10.5% savings from uncompensated care
b. Addt'l benefits in HSA	3% benefits in HSA but not in 9/7/93 draft
Total	−8%

5. Adjusted Claims Cost

	Single	Two parent	Single Parent	Couple	Composite
Claims Cost	$1,927	$5,590	$3,280	$4,162	$3,387
Change in distribution		−1%			
Cost of migration		12%			
Reduction in cost shifting		−11%			
Addt'l benefits in HSA		3%			
Total Adjustment		4%			
Adjusted Claims Cost	**Single**	**Two parent**	**Single Parent**	**Couple**	**Composite**
	$1,997	**$5,794**	**$3,399**	**$4,314**	$3,510

Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

6. Adjustments to Net Premium (Loading)

a.	Surcharges/assessments	7.0% incl. margins for WC, auto, guar. funds,..
b.	Current Expense Ratio	13.2% current retention level
c.	Change in Expense Ratio	0.2% WEDI, Alliances, fully insured vs ASO
	Total Loading	20.4%

7. Average Premium After Reforms

Adjusted Claims Cost	Single	Two parent	Single Parent	Couple	Composite
	$1,997	$5,794	$3,399	$4,314	$3,510
Loading Factor	20.4%				
Adjusted Premium	$2,509	$7,278	$4,270	$5,419	$4,410

Premiums in Regional Health Alliances
Under the Clinton Administration's Proposed Health Security Act

8. HIAA Estimate versus Administration Estimate

	Single	Two parent	Single Parent	Couple	Composite
HIAA	$2,509	$7,278	$4,270	$5,419	$4,410
Administration	$1,932	$4,360	$3,893	$3,865	$3,090
% understated	−23%	−40%	−9%	−29%	−30%

– P. Anthony Hammond
– 12/3/93

HSAPREM.WK1