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MEDICAL BENEFITS FOR LARGE GROUPS

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EDWARD J. WOJCIK
Recorder: JANET MARIE CARSTENS

- Discrimination issues
- Dealing with HMOs
- Effect of cost containment provisions
- Current cost trend levels
- Recent trends in benefit design
- Other current issues

MR. TED A. LYLE: Our speakers include Ed Wojcik, George Model, and myself. Ed has been an actuary for the Blue Cross/Blue Shield Association for 19 years. For 12 years prior to that he was with CNA. Ed is a member of the American Academy Task Force. This task force worked on the creation of the proposed valuation of benefits rules required under the 1986 Income Tax Act. Ed will speak on the purpose of Section 89 regulation and the proposed valuation methodology that has been put forth by the American Academy Task Force.

George is a consultant in the Boston TPF&C office. He is the practice leader of the employer group consulting practice. He has been a consultant with TPF&C for seven years and for ten years prior to that was with New York Life. George will speak about an employer's perspective on dealing with HMOs.

I am a consultant in the Minneapolis office of Tillinghast. I do consulting work for commercial insurance carriers, Blue Cross/Blue Shield organizations and HMOs. I have been a consultant for four years. Prior to that, I spent ten years in the group area of various commercial carriers.

Current cost trend levels are in the range of 18-24%. A rough breakdown would be 9-10% due to CPI type cost increases, 2-3% from deductible erosion, 5-7% due to increases in utilization and changes in technology, and a few points due to the impact of selection from dual choice options or HMO penetration. There are several specific components contributing to the current trend levels.

We have a return of public to private sector cost shifting. When the diagnosis-related group (DRG) payment mechanism was first instituted, the amounts paid to hospitals were relatively large. For the last three years, the increases have been pretty austere. As a result, we are seeing cost shifting back to the private sector. A similar phenomenon has occurred with the state Medicaid programs.

We have seen changes in hospital technology and hospital staffing. Technological advances in medical care are unlike technological advances in other areas. These advances rarely result in efficiencies or cost savings. More often, they

result in the purchase of relatively expensive equipment requiring additional operators and resulting in the performing of additional tests. Examples of additional testing would be magnetic resonance imaging or digital cardiac imaging. These tests may or may not replace previous tests that have been performed.

The largest component of hospital expenses is salaries. In 1972, we had approximately 50 nurses for every 100 patients. In 1987, according to American Nurses Association statistics, there were 91 nurses for every 100 patients. This results from the increased severity of illness of hospital patients due to the removal of excess utilization days. It also results from the use of increasingly complex technologies and the increased use of critical care units within hospital settings. According to 1987 American Hospital Association (AHA) statistics, more than 50% of hospitals indicate they have a nursing shortage. This implies significant salary increases for hospital staff people.

There is a direct impact of AIDS. The number of affected individuals is growing. Even though case management procedures have kept the cost per case down, the cost of care has increased. We also have a financial wild card that has been thrown in due to the improved treatment techniques that are available.

An example of this is azidothymidine (AZT) which elongates life, but at a substantial cost. There is also an indirect impact of AIDS. Hospital personnel are taking upgraded protection measures, and this is resulting in increased costs. As one example of this, Hartford Hospital in 1987 spent $500,000 more than they did in 1986 for rubber gloves.

There is an increased cost associated with offering people a choice among multiple medical expense plans. There is similarly an increased cost due to HMO penetration. The mere fact that dual choice or multiple choice environments are becoming more common has some additional cost associated with it. The example I have used of this in the past is: if you have a benefit plan (Plan A) with a number of medical service benefits and a preventative dental benefit for $100 per subscriber, and another plan (Plan B) which has the same medical service benefits and a vision benefit for $100 per subscriber, and you go to an employer and offer each individual employee a choice between Plan A and Plan B, you may find that your plan cost will increase to $103 per subscriber.

A lot of people have included the cost of COBRA extensions in their trend assumptions. To the extent COBRA is included, as the experience base matures, I expect this component will go away. I have also seen carriers include in their trend the cost associated with the shifting of Medicare disabled lives from the government back to employers.

Prescription drug charges have had large increases due to both increasing utilization and increasing costs per unit. Earlier hospital discharges have resulted in increased posttreatment pharmaceutical usage. In addition, the Orphan Drug Act of 1983 was passed to encourage the development of drugs for rare diseases, with a seven-year monopoly granted to the manufacturers. This has resulted in the manufacturers being able to charge virtually any amount they want for these drugs. For example, human growth hormone costs about $30,000 per year.

We also have an additional impact of new drugs coming on the market. Quite often the introduction of a new drug may result in less advantageous drugs,

used to treat the same disease, being removed from the market. The manufacturers of the less advantageous drugs are afraid of being sued for marketing an unsafe product. An example of this is Tissue Plasminogen Activator (TPA) which is a genetically engineered and consequently pure, anticlotting drug used in the treatment of heart attacks. It costs approximately $2,200 per dose. TPA has been used to replace streptokinase, which is another clot dissolver costing about $85 per dose.

Both drugs reduce the mortality associated with heart attacks by about 25%. TPA has become commonly used by hospitals just because of its genetic purity.

Malpractice suits have led to increased costs for providers. Consequently, the cost of professional liability coverage goes into the provider fee schedules, resulting in increased medical care costs.

Another form of provider cost shifting has resulted from alternative delivery systems. HMOs, insurance companies or freestanding PPOs have negotiated discounted reimbursement arrangements with providers. The cost that providers are not collecting under these programs, representing the difference between their normal billing rate and the negotiated discounted rate, has served to raise their usual and customary fee schedules.

Increasing utilization relating to treatment of mental and nervous conditions and substance abuse rehabilitation programs has led to increasing costs. The intense amount of advertising for these programs has resulted in the usage increasing correspondingly. Many of the empty hospital beds have been turned into rehabilitation beds.

An increasing sophistication on the part of various providers has led to increased costs. Providers have learned that as people begin to analyze the cost increases associated with various components, some components are analyzed more than others. Providers negotiating fixed unit costs, such as per diem arrangements with hospitals, are finding that it is tougher to get cost increases through in these areas. Therefore, they are starting to put cost increases through in the areas that are not monitored so closely. For example, a look at detailed hospital bills will reveal separate charges for virtually everything. A box of Kleenex may cost $8.00. An increasing degree of sophistication on the part of providers in their billing procedures has resulted in cost shifting into areas where they can get the cost increases.

Some additional items which have led to increasing costs are an aging population and the erosion of plan deductibles.

Overall, the effect of many of the above items is hard to quantify. As you monitor experience costs, I think you will find that trends will probably continue to run in the 20% range for the foreseeable future. The effect of cost containment programs has not been what it was expected to be when they were first introduced. The value of pre-certification in concurrent review programs, second surgical opinions, 100% coverage for use of outpatient facilities or outpatient surgical facilities was originally thought by many carriers to reduce costs in the range of 10-15%. This reduction has been closer to 4% or 5%. Some of the savings have gone away because of the enriched benefits, some because of different billing practices by providers, and some might have just been over optimism on the part of the original pricing assumptions. One example is that the incentives provided to encourage people to use outpatient surgical facilities

have not resulted in significant savings because of the increase in charges for outpatient surgical facilities and the enhanced benefits that have been provided to encourage people to use these facilities.

One recent trend that we are seeing in benefit design is a shift to flexible benefit plans in the large employer market. We are also beginning to see development of point of service option plans. Under this type of plan, the employee has a choice between two different benefit plans, one within a specified provider network and the other outside the provider network. The decision to use the restricted network is made when service is needed, rather than with an annual lock-in. The most notable example of this type of plan is the Allied Signal account which was a nationwide employer who had signed a contract with CIGNA HMOs. In essence, they put in a point of service plan for all of their employees. A number of our HMO clients are attempting to develop or have developed similar point of service type products with the choice occurring when the service is needed. A similar shift is occurring with commercial carriers who have been establishing provider networks where providers are usually paid on a discounted fee-for-service basis, and incentives are granted to employees to use the provider network.

A second trend we are seeing is an increasing demand for an unbundling of services. Many employers are looking to develop a modular approach to their benefit packages. They may be seeking different sources for claim services, actuarial services and provider contracting. They may also desire to put together a provider network from an alternate source. This type of modular approach allows employers the ability to switch to another source for a specific component if they become unhappy with one component of their program.

A final trend we are seeing in recent benefit design is an increasing level of cost sharing with employees as employers put together various packages. Much of the cost of these benefit packages is being passed back to the employees themselves.

MR. GEORGE D. MODEL: My subject is employer perspectives on HMOs. I will spend a fair amount of time on HMO pricing issues, and I will briefly cover strategic issues as well. I will start by asking a couple of basic questions. Number one, why have employers offered HMOs? Basically by the HMO act, there is a necessity to offer HMOs under the dual choice requirements in certain mandated situations. Employers have perceived that HMOs, with their controlled access to care and wellness orientation, might be a potential vehicle for cost savings. Employees have wanted to be included in HMOs as well. Another appealing inherent feature of HMOs is capitated care, which facilitates the budget process -- you know what the HMO will cost in advance.

Why have employees joined HMOs? Employees sometimes perceive them to be convenient access to care. For example, an employee with no established physician relationship, who is in good health or resides in a new area may find it appealing to have the one-stop shopping offered under HMOs. There also may be an employee perception of reduced financial risk in exchange for a monthly premium and very modest copayments. At the point of service they essentially have full care. Another potential appeal of HMOs is that they may cost less than the indemnity plans, depending upon the employer's strategy.

How have HMOs changed over time? Approximately ten years ago there were relatively few HMOs, and as of late 1987, there were almost 700. There used to

be very little competition in the industry, and now it is fiercely competitive. The prevailing wisdom is that the less financially viable HMOs may drop out or be bought out by HMO conglomerates. HMOs over time have come to be generally well accepted by employees. Initially HMOs were viewed as employer-controlled vehicles with capitated paid in advance cost that would seem to facilitate control of those costs. Now there is a proliferation of HMOs and multiple option plans. In certain situations employers have found that HMOs are costing them more, in particular on the risk transfer side because of adverse selection. So whereas 10 or 15 years ago we viewed HMOs as an interesting alternative, now we sometimes view them as a threat to management control. Graphs 1 and 2 illustrate the growth of HMOs.

In 1981 there were about 270 HMOs, while in 1987 there were about 2 1/2 times as many. Enrollment as of 1987 had risen to almost 30 million from the start of about 11 or 12 million in 1981. Therefore, HMOs are becoming a very common form of health care delivery.

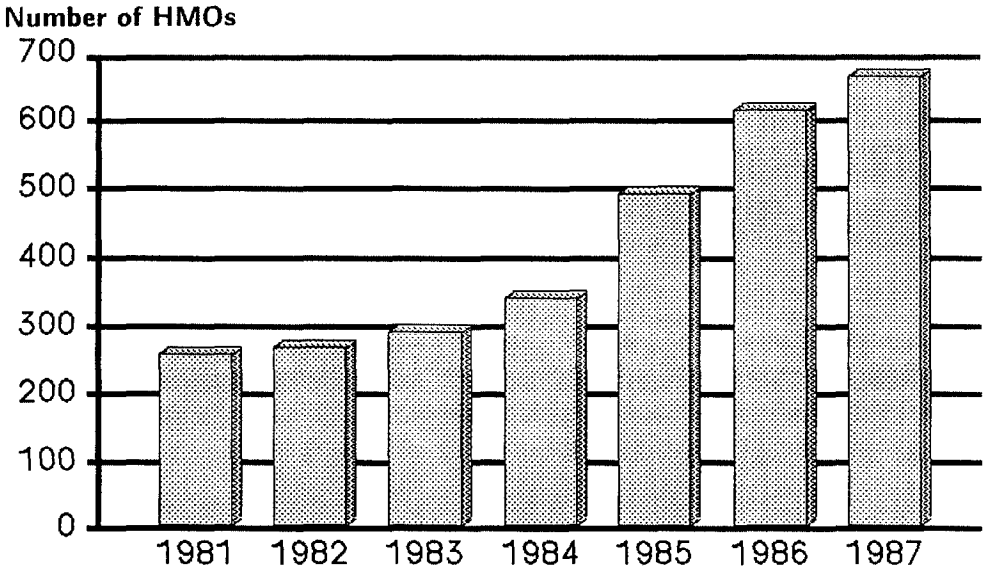
What's changing in the legislative regulatory arena? At the time of this meeting HR3235, the Waxman Bill, was awaiting the President's signature. Under current law, HMO contributions in a mandated situation for a federally qualified HMO are governed by Section 110808. This section defines equal dollar contribution requirements, but it is quite unclear whether a demographic adjustment is allowable under current law. In most employer situations there will not be a mandate involved. Under what I will call the Waxman Bill, those rules have changed. Again, you are only limited under a mandate. Under a mandate, you cannot financially discriminate against employees in their choice of health care delivery. What is required is a reasonable cost method which avails employees fair choice. Under current law, essentially no experience rating is allowed by HMOs other than on a broad community basis. Under the Waxman Bill, prospective experience rating will be allowed. You will be limited to charging employee groups of less than 100 lives, no more than 110% of what you would otherwise charge under the current methods. For large employer groups, you will presumably be free to do anything "reasonable." The dual choice requirement under prior law essentially required you to offer when mandated the appropriate HMO if there were 25 employees in the service area of an HMO not otherwise served by an HMO of either the Staff or the Individual Practice Association (IPA) model. Under the Waxman Bill, the dual choice requirement will be repealed seven years after the date of enactment.

Many employers have adopted a benign policy with regard to HMOs. This might entail strict compliance with Section 110808 by offering virtually any HMO which asks to be included in the program whether the particular HMO is federally qualified or contributing the same dollar amounts to the HMO that were contributed to the indemnity plan. The bottom line under this scenario is that employers sense they have lost a measure of management control. A few characteristic statements of concern that we have heard from employer clients are: HMOs would be all right if they were willing to experience rate, adverse selection is killing us, and I know we are losing money.

There are also concerns expressed in the administrative area; managing 100 HMOs is an administrative nightmare -- it is like having four carriers for each of our locations; I am more concerned about HMO mergers or failures than activities in my own industry, and HMOs are countering my efforts to revise our benefit program. One client in particular, a large employer with roughly 100,000 employees, saw the number of HMOs included in its program grow from about 60 in

GRAPH 1

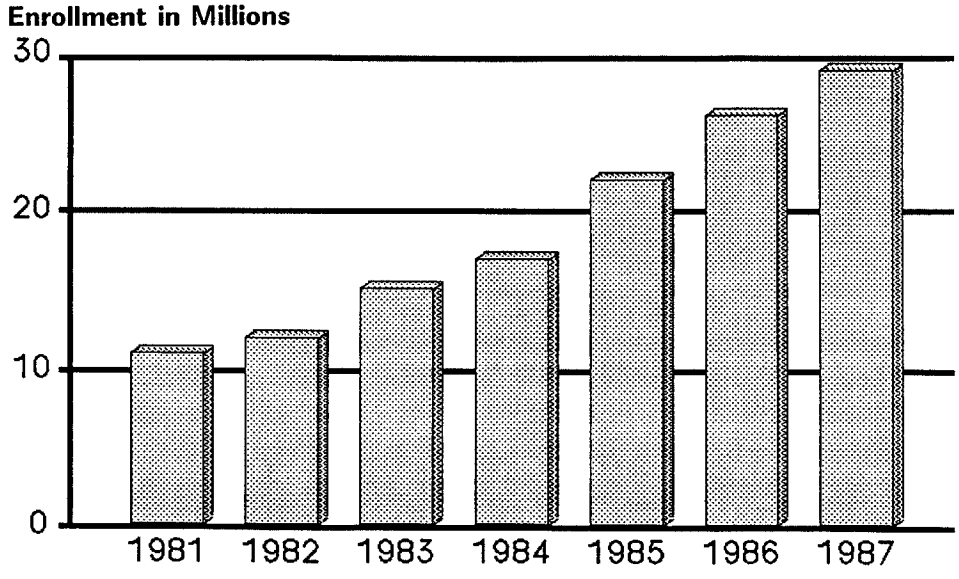
HMO GROWTH



Source: The InterStudy Edge, Spring, 1988

GRAPH 2

ENROLLMENT GROWTH



Source: The InterStudy Edge, Spring, 1988

1980 to more than 300 in 1987. The number of employees enrolled in HMOs for this same client grew from about 4,000 in 1980 to 30,000 in 1987. The following Graph illustrates employer contribution practices for a corporation which we will call LMN Corporation (Graph 3).

LMN Corporation began 1984 with an HMO cost of about $2,200, an indemnity cost of $1,755, and a company HMO cost of about $200 less than the indemnity plan costs. Over the ensuing period, the indemnity plan costs went up at the rate of 10-11% per year, while the HMO cost went up at the rate of 2-3% per year (HMO rates for 1989 are typically increasing in the neighborhood of 20-25% a year). Since the HMO employer cost is driven by the indemnity plan cost, and because of the leveraging of the employee contributions, we see that the company cost of HMOs has risen 45% even though the gross cost has risen only 7.4%.

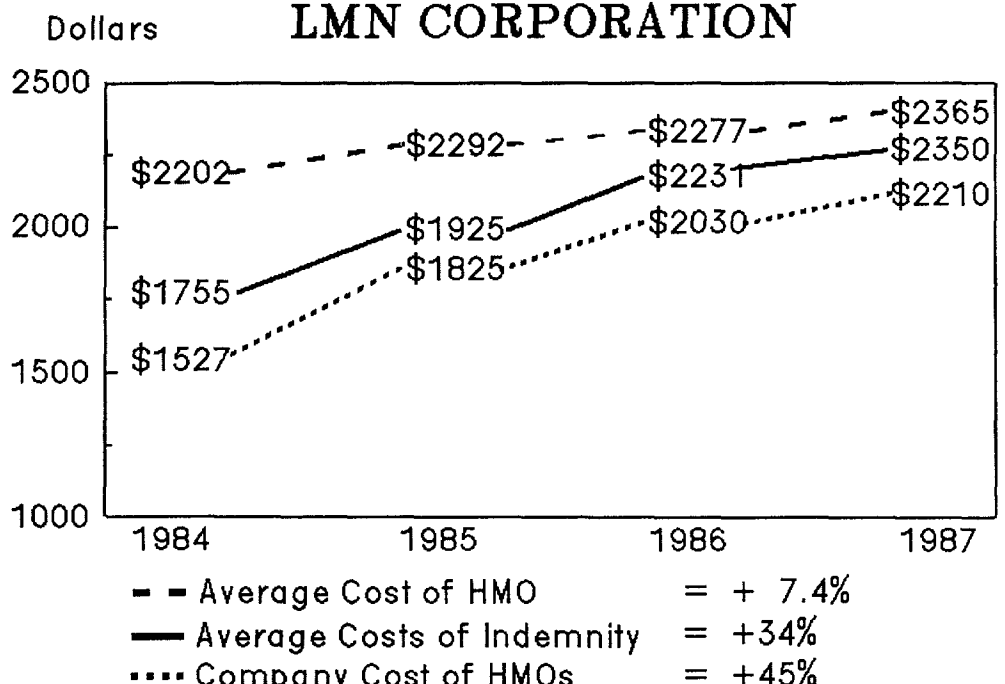
Let us turn now to HMO pricing. Five basic factors to consider are as follows: demographics, by which we really mean age/sex and family status; geography; the deletion of margins in the indemnity plan rate prior to the setting of HMO contributions; the rational removal of cross subsidies, for example, between retirees and actives or retirees, disabled employees and actives; and a reflection of health status above and beyond what would be indicated purely by quantifiable measures. To illustrate how these five factors are utilized in HMO pricing, assume we have a 1,000 life employee group, which we have subdivided into two subgroups. All employees are single. One subgroup, Group A, has three quarters of the employees at a cost of $1,100 a year per employee. Group B has the remaining quartile of employees, and the underlying cost is $700 a year per employee. On average, the cost is $1,000 per employee, resulting in a $1 million total cost (we withheld employee contributions for the purpose of simplicity). Now assume that Group B opts for HMO coverage with an HMO premium of 90% of the composite indemnity plan cost or $900. What ensues at first glance is that 250 employees have enrolled in the HMO at an apparent savings of $100 each, or an overall savings of $25,000. In reality, you have contributed $200 more on behalf of the HMO enrollees than you would have if you had not offered the HMO, or an overall additional cost of $50,000.

Age adjustments involve ascertaining that the expected cost of these employees is $700 by analyzing the characteristics of the HMO enrollees. For example, it may turn out that on average, your HMO enrollees are two or three years younger than your indemnity plan enrollees. In order to preserve the original employer cost, there are two potential solutions. The first is to adjust the employer HMO contribution down from the $900 preliminaries indicated to $700. The result would be that the employer would be cost neutral with the introduction of the HMO. The HMO would also be cost neutral, since they would still receive the same premium amount, but the employee would be paying $200 more. In essence, the employer has shifted spurious costs from the employer to the employee. The second potential solution, which is more aggressive and more difficult to consummate and now perhaps running afoul of HMO regulation, would be to negotiate the premium rate with the HMO. If we had negotiated a $700 premium rate with the HMO, the $200 spurious costs would be shifted from the employer to the HMO. However, the $700 would be a fair recognition of the risk that the HMO is assuming.

Geographic adjustments can be illustrated by Table 1. For this example, we looked at the distribution of employees by five health care cost areas. In the third column we have normalized cost factors to average to a monthly cost of

EMPLOYERS' CONTRIBUTION PRACTICES

LMN CORPORATION



$100 per employee. For an employee in the high-cost area the employer would contribute to the HMO $113 less any indemnity plan employee contribution. That number would grade to $75 in the low-cost area. On average, you would contribute the $100 per employee you would have contributed had you not done the geographic adjustment. Without the geographic adjustment, the employees in low-cost areas would receive free HMO coverage, and the employees in high-cost areas would have to absorb a substantial portion of the cost. Whenever HMO coverage is absolutely free, employees who have alternate coverage available through their spouse may take HMO coverage that they do not intend to use. If the family premium is $2,500 a year and services are not used at all, you have just lost $2,500 to the benefit of the HMO.

TABLE 1

HMO PRICING -- GEOGRAPHIC RATING

No. of Employees By Area	Relative Area Factor	Normalized Area Factor	Indemnity Plan Gross Value
200	1.20	1.13	$ 113
500	1.10	1.03	103
100	1.00	.94	94
150	.90	.85	85
50	.80	.75	75
Weighted Average	1.065	1.000	100

The third pricing factor to be cognizant of is margins. If the employer's budget rate of $100 per month for a single employee includes explicit or implicit margins through the use of a conservative trend assumption or the removal of a deficit recovery provision, then the margin should be eliminated prior to setting the HMO contribution level. For example, if these marginal items amounted to $10, you would use $90 as your reference indemnity plan costs, prior to employee contributions, before setting your HMO contribution level.

The fourth pricing factor is the removal of cross subsidies. In the above example, the employer cannot differentiate his retiree pre-Medicare cost from his active employee cost. When unbundled, the $100 average cost represents $90 for the 1,000 active employees and $200 for the 100 retirees under age 65. When setting your HMO contribution rate, you would use the $90 similar adjustment for disabled employees.

The above example is from the results of an actual employee/employer group of approximately 100,000 lives. This group was able to look at the 1986 indemnity plan experience of the 1987 HMO enrollees. The average cost for the HMO transfers was $743 compared to the $1,300 average cost for those employees who stayed in the indemnity plan. To justify this cost difference purely on the basis of age, you would need about a twelve-year age difference. Therefore, as an example of our fifth pricing factor, the employees who went into HMOs were healthier beyond any quantifiable measure. If you were armed with this information prior to the next HMO enrollment, you could perhaps take advantage of it. Unfortunately, employers rarely have this information available.

An interesting way of characterizing this nonquantifiable health selection is illustrated in Table 2. Assume in the first year there is a 35% difference between the experience of the HMO migrants and those who stayed behind in the

indemnity plan. If the only difference in demographics and geographics is a two- or three-year age difference, you might come up with a 10% demographic difference. The balance of 25% would be attributable to nonquantifiable health risk factors. If we follow this cohort through a four-year period and compare them to their indemnity plan brethren who are two or three years younger, we will find that the longer the employee is in the HMO, the more this select health status will wear off. Eventually, at the end of the select period, the health status will be the same as it is for the rest of the group. Eventually, the HMO could become the institutionalized provider of care. You could argue that your impaired employees will want to stay in the health care delivery system they are in. In this particular example, we estimated the preselection would wear off by 8% per year.

TABLE 2

ILLUSTRATIVE HMO SELECTION PATTERN

Difference in Health Care Utilization for
HMO Participants Compared with Average Employee

	Years Since HMO Election			
	1	2	3	4
Demographic Factors	10%	10%	10%	10%
Health Factors	25%	16%	8%	0%
Total	35%	26%	18%	10%

A few HMO strategic considerations are benefit design and positioning, risk analysis issues which we have already covered, and nonfinancial issues, including selection criteria (given that you want to offer fewer HMOs or newly offer HMOs, how do you decide which ones you will offer on a qualitative basis) and also administrative and communications issues. In the design and positioning process it is very important to look at what the underlying employer's objectives are. For example, is the employer paternalistic, wanting to provide very rich benefits, or is the employer as Allied Signal was, in a cost control mode? Is the employer in favor of extensive employee choice, or is the employer oriented towards administrative simplicity that leads to very little employee choice? Given that you are going to offer an HMO, which benefits do you want to offer? Do you want to offer drug and vision benefits, for example, which may not be available in the indemnity plan?

How will the HMO appeal to employees when arrayed against the indemnity plan option or options? In general, how should HMOs be positioned? Do we view them as the high option in our program because of the very rich level of benefits, or do we view them as the low option because of the restricted access to care? I have one client who has a full flexible benefit program where the employer credits the employee with the full dollar value of his group medical benefits. In this situation when one tries to make a demographic adjustment to the contribution level, the cost of the HMO must be loaded to accomplish the same results as in a nonfull flexible scenario.

Selection criteria includes type of HMO, size, staff, services, benefit specifications, administrative flexibility, price position, financial stability, contracting and liability issues and references. Basically these are the same parameters you would consider when purchasing virtually any services. We are looking in

essence at the depth and breadth of providers, the quality of the product, the financial viability of the product, the cost of the product, and in this instance the administrative ease of offering the product. In conclusion, one should not overlook the administration and communication issues. The benefit staff eventually is put in a position of having to deal with the providers we have offered in their programs. At the same time we find that the overall employee appreciation of any benefit program relies very heavily on how it is communicated to them. You may offer very rich benefits at a minimal cost, but employees will not find that to be a positive benefit unless there is a strong communication process.

MR. EDWARD J. WOJCIK: I will cover the valuation part of the Section 89 process. Section 89 attempts to prevent employers from using tax-favored health and other employee benefit plans to discriminate in favor of highly compensated employees (HCE). It also provides disincentives for not covering nonhighly compensated employees (NHCE). The law includes tests to employees with regard to eligibility for coverage under employer plans and the average value of the benefits provided. An employer may fail a test if:

1. Too few NHCE are allowed to enroll in the benefit plan(s);
2. Lesser benefits are offered to NHCE;
3. NHCE choose options with lesser benefits in multiple choice situations;
4. Too many NHCE opt out of coverage.

The testing requirements to compare values and to determine average values of benefits provided NHCE as compared to HCE necessitated the development of a consistent valuation methodology. The resultant values are used to determine (1) whether an employer's plan is discriminatory, and, (2) if discriminatory, the taxable value of the discriminatory portion (although the Treasury Department might eventually issue a separate valuation methodology for Item 2 above).

The AAA submitted a proposal to value accident and health plans under Section 89 of the Internal Revenue Code on April 25, 1988. The key to the AAA valuation proposal is to provide consistent relativities between plans without being affected by geographic and demographic employee characteristics, the actual health care utilization level or health level of plan participants, the type of plan or provider network under which the benefits are provided, and the variations in levels of managed care (cost containment) features, including the degree of care with which these are implemented. The proposal provides an adequate level of equity while being practical to administer.

Therefore, the value for a specific plan is based entirely on its provisions. For 1989, each valuation point is worth $1.00. The factors for 1990 will be adjusted based on the medical component of the CPI (urban) for the year ending September 30, 1989, with similar updates for subsequent years. The overall methodology will be reviewed periodically to reflect changes in health care costs and benefit utilization practices.

The valuation methodology is structured to value each "basic component." In other words, a benefit amount will be determined for each category of health care services, without reference to other categories. Hospital inpatient services, dental services, surgical services, etc., are considered basic components because each of them may be subject to a separate deductible or other payment limitation. Major Medical benefits are valued based on the Plan's definition of covered expenses. This includes amounts in excess of basic benefit limits to the extent that they are covered under the Major Medical portion. A Major Medical

component (e.g., Comprehensive Major Medical [CMM] and Supplemental Major Medical [SMM] is defined as a segment of a plan for which the benefit amount is determined by combining two or more categories of health care services (hospital inpatient, surgical, etc.). CMM plans have no basic benefits, while SMM plans cover expenses beyond the limits of basic benefit coverage.

Dependent coverage is considered as a separate plan even though the structure of the valuation methodology is the same as for employee coverage. Each rate structure will have its own factor. The suggested factor for the dependent portion of family coverage under the two rate structure (single and family) is 1.5 (i.e., dependent value is 1.5 times the employee value).

Since the AAA valuation tables or modifications thereof are not yet issued, employers will be permitted under pending technical amendments to value benefits using "any actuarially reasonable valuation method." This includes an analysis of experience costs used to determine COBRA premiums. The same valuation method must be used for all plans aggregated for purposes of applying the nondiscrimination rules. The interim rules allow an employer who uses an actuarially reasonable valuation method to adjust for cost differences attributable to geographic disparities, demographics or varying utilization. Also, the rules provide that all HMOs with the same level of employer contribution per employee will be deemed to have the same value.

To illustrate the valuation process, two examples for calculating plan values using the AAA tables are provided. Plan A has a benefit value of 981 points for the employee, while Plan B, an HMO plan, has a value of 1,219 points for the employee. Dependent values are 1.5 times the respective employee values.

Accident and Health Plan Valuation

Plan A -- CMM Plan

Scope of Coverage:

Inpatient and Outpatient Hospital Care*

Inpatient and Outpatient Physician Services

Surgical Fees and Other Medical Services

Diagnostic X-Ray and Laboratory Fees

Prescription Drugs

* $100 deductible per each admission not counted toward overall deductible or out-of-pocket expense limitation

Excluded: Skilled nursing care, dental, vision and hearing care, and outpatient psychiatric

Reimbursement Levels:

Coinsurance:	80%/20% basis
Deductible:	$200 per person
Out-of-Pocket Maximum:	$1000 not including $200 deductible

Accident and Health Plan Valuation

Plan B -- HMO Plan

Scope of Coverage:

Same as Plan A, with the following differences:

1. No deductible for inpatient admission
2. Outpatient psychiatric services provided, but limited to 20 visits per year at 50% coinsurance
3. Office visits -- $5 copay per visit
4. Prescription drug -- $3 copay per prescription
5. Well-baby care and immunizations provided

Reimbursement Levels: All at 100% except for above limitations

Accident and Health Plan Valuation

Plan A -- Calculation of Plan Value (Abridged)

		Total Value	Adjustment	Eligible for Major Medical
A.	Facility Inpatient	560	- 9	551
B.	Facility Outpatient	120		120
C.	Surgical Fees	225		225
D.	Physician and Other Professional	325	-120	205
E.	Diagnostic X-Ray and Laboratory Fees	30		30
F.	Prescription Drugs	55		55
G.	Other Medical Services	25		25
	Total Eligible for Major Medical			1211
	Average Benefit Percentage			.81
	Benefit Value (100% Employer Contribution)			981*

* Dependent Value 981 X 1.5 = 1471

The 9-point adjustment made on the Facility Inpatient is due to the $100 per admission deductible. The adjustment of 120 points on the Physician and Other Professional is due to the exclusion of outpatient psychiatric coverage. The total plan value of 1,211 is adjusted by a factor of .81 due to the $200 deductible and coinsurance provisions. This factor is obtained from the major medical table provided in the valuation proposal.

Accident and Health Plan Valuation

Plan B -- Calculation of Plan Value (Abridged)

		Total Value	Adjustment	Eligible for Major Medical
A.	Facility Inpatient	560		560
B.	Facility Outpatient	120		120
C.	Surgical Fees	225		225
D.	Physician and Other Professional	325	-112	213
E.	Diagnostic X-Ray and Laboratory Fees	30		30
F.	Prescription Drugs	55	- 9	46
G.	Other Medical Services	25		25
	Total Basic Benefits Value			1219*

* Dependent Value 1219 X 1.5 = 1828

The same values are initially used for the HMO plan as were used for the CMM plans, since no distinction is made for demographics or type of provider. The adjustment of 112 points on the Physician and Other Professional is due to the limited outpatient psychiatric benefit. The adjustment of 9 points on the Prescription Drugs is due to the $3.00 copay. Since the plan provides 100% coverage except for plan limitations, there is no deductible or coinsurance adjustment.

The above values are used in the tests for nondiscrimination testing. Examples of these tests appear at the end of the text. Some definitions which apply to nondiscrimination testing are as follows:

PLAN
Each option, different benefit plan, or different employer contribution is considered a separate plan; each HMO and PPO is a separate plan; employee coverage and dependent coverage for the same benefits are separate plans.

PLAN VALUE
Includes employer-provider insurance, not services or claims paid; employee contributions must be subtracted from the plan value.

PLAN AGGREGATION
Plans within a 5% differential of each other can be combined as one plan.

HCE
- o Annual compensation exceeds $75,000*
- o Annual compensation exceeds $50,000* and the employee is among the highest paid 20% of all employees
- o Officer and compensation greater than $45,000* annually
- o 5% owner

* These are 1987 values and would have to be indexed for 1989.

EXCLUDABLE EMPLOYEES*

- o Part-time employees working less than 17.5 hours per week or less than 6 months per year
- o Short service employees or those not completing 6 months of service for core health benefits (one year for other benefits)
- o Employees under age 21
- o Nonresident aliens with no U.S. source of income

* All employees not excludable are considered includable employees.

DISCRIMINATORY EXCESS

This is the difference between the HCE benefit value and the highest permitted benefit value within the rules.

LINE OF BUSINESS (LOB)

This is a self-sustaining unit operating separately for bona fide business reasons and which has at least 50 employees. The employer must notify the Treasury Department about this unit and satisfy Treasury qualification rules or have a percentage of all the employer's HCE. In addition, the unit must be located in a separate geographic area (35-mile separation per pending amendment) from other operating units in the same LOB.

PENALTIES FOR A DISCRIMINATORY PLAN

Employee: Each HCE must include the value of the discriminatory excess benefit in income.

Employer: An excise tax at the highest individual rate is imposed on the value of the plan benefits provided to HCE with discriminatory excess whose W-2s were incorrect or did not include the value of the discriminatory excess.

ALTERNATIVE TEST

The alternative test is to ensure broad enrollment of NHCE. Health plans maintained by certain small employers will be considered nondiscriminatory if the plan covers at least 80% of the employer's NHCE and the plan does not include any provision which by its terms or in operation discriminates in favor of HCE. Comparable plans can be aggregated if they are within a 5% differential. Employee and family coverage may be tested separately. Sworn statements are needed to exclude NHCE without dependents from the family coverage test. The alternative test is:

$$\frac{\text{ENROLLED NHCE}}{\text{INCLUDABLE NHCE}} \geq 90\%$$

Aggregation of Plans Within 5% Differential

The pending Technical Corrections bill modifies the alternative test to allow larger employers to use it. Under the modified test an employer may aggregate plans within a 20% differential if the aggregated group of plans cover at least 90% of the NHCE and satisfy the nondiscriminatory provisions test. The modified alternative test is:

$$\frac{\text{ENROLLED NHCE}}{\text{INCLUDABLE NHCE}} \geq 90\%$$

Aggregation of Plans Within 20% Differential

ELIGIBILITY TESTS

This 3-part test determines whether there are enough NHCE eligible for benefits within 50% of the best benefits offered any HCE.

MEDICAL BENEFITS FOR LARGE GROUPS

1. **50% Test**
   A plan is considered nondiscriminatory if at least 50% of employees (EE) eligible to participate in the plan are NHCE, or alternatively, if the percentage of NHCE eligible to participate is greater than or equal to the percentage of HCE eligible to participate.

$$\frac{\text{ELIGIBLE NHCE}}{\text{TOTAL INCLUDABLE EE}} \geq 50\%$$

OR

$$\frac{\text{ELIGIBLE HCE}}{\text{INCLUDABLE NHCE}} \geq \frac{\text{ELIGIBLE HCE}}{\text{INCLUDABLE HCE}}$$

2. **90%/50% Test**
   At least 90% of NHCE are eligible to participate in a plan providing benefits with a value at least equal to 50% of the largest employer-provided benefit value available to any HCE. This is a company-wide comparison.

$$\frac{\text{ELIGIBLE NHCE FOR ADEQUATE BENEFITS*}}{\text{INCLUDABLE NHCE}} \geq 90\%$$

* Where adequate benefits are determined by the ratio

$$\frac{\text{NHCE BENEFIT}}{\text{LARGEST HCE BENEFIT}} \geq 50\%$$

3. **Nondiscrimination Provision Test**
   A plan may not contain any discriminatory eligibility provisions.

BENEFITS TEST

The benefits test is to ensure that the NHCE enrolled receive an average benefit high enough compared to that of the enrolled HCE. This is a company-wide test. Employees or family members who have core coverage with another employer may be disregarded provided the employer complies with the sworn statement requirements. Dependent coverage may be tested separately.

a) if one plan

$$\frac{\text{ENROLLED NHCE}}{\text{INCLUDABLE NHCE}} \geq 75\% \times \frac{\text{ENROLLED HCE}}{\text{INCLUDABLE HCE}}$$

b) if more than one plan

$$\frac{\text{AVG. ENROLLED NHCE BENEFIT}}{\text{INCLUDABLE NHCE}} \geq 75\% \times \frac{\text{AVG. ENROLLED HCE BENEFIT}}{\text{INCLUDABLE HCE}}$$

HYPOTHETICAL GROUP FOR NONDISCRIMINATION TESTING

Group Size	135 Employees (EE)
Includable EE	125
HCE	25 (20 have Dependents)
NHCE	100 (70 have Dependents)

	Single		Dependent	
	Plan A	Plan B	Plan A	Plan B
AAA Value	$ 981	$ 1219	$ 1471	$ 1828
Gross Premium (Interim Value)	990	1050	1460	1550
EE Contribution	240	300	360	450
AAA Values	741	919	1111	1378
Interim Rule Value	750	750	1100	1100

SCENARIO I: CMM ONLY

	EMPLOYEE (EE)			DEPENDENT (DEP)		
	Enrolled	Includable	Value*	Enrolled	Includable	Value*
HCE	25	25	741	20	20	1111
NHCE	80	100	741	56	70	1111
NHCE	75	100	741	50	70	1111

* Employer-provided value

ALTERNATIVE TEST
NHCE enrollment at or above 80 EE and 56 DEP will pass alternative 80% test.

3-PART ELIGIBILITY TEST
If less NHCE enrollment for either, must take 3-part eligibility test.

a) 50%: 100/125 EE $\geq$ 50% and 70/90 DEP $\geq$ 50%

b) 90%/50%: 100% eligible for same benefit

c) No nondiscriminatory provisions

SIMPLE BENEFITS TEST

EE: $\frac{75}{100}$ X 741 $\geq$ 75% $\left[\frac{25}{25}\right.$ X $\left.741\right]$ Passes

DEP: $\frac{50}{71}$ X 1111 $\geq$ 75% $\left[\frac{20}{20}\right.$ X $\left.1111\right]$

$793.57 $\neq$ $833.25 Fails

Taxable income for HCE enrolling for DEP coverage = $39.68. If interim value of 1100 is used above, the taxable income for HCE enrolling for DEP coverage is $39.29.

MEDICAL BENEFITS FOR LARGE GROUPS

SCENARIO II: CMM AND HMO CHOICE

	EMPLOYEE (EE)			DEPENDENT (DEP)		
	Enrolled	Includable	Value*	Enrolled	Includable	Value*
HCE-CMM	20	25	741	15	20	1111
HCE-HMO	5	25	919	5	20	1378
NHCE-CMM	60	100	741	40	70	1111
NHCE-HMO	15	100	919	13	70	1378

* AAA Employer-provided values, interim rule (IR) values are same for CMM and HMO -- $750 EE and $1100 DEP.

ALTERNATIVE TEST

a) If at least 80 NHCE and 56 DEP of NHCE are enrolled in CMM and HMO plans combined, group could pass alternative test under IRS. Under IR two plans could be aggregated because employer-provided values are the same for CMM and HMO.

b) Rules in original legislation require plan values to be within 5% of each other in order to aggregate. Under these rules, sample group would not pass alternative test because plans cannot be aggregated under AAA valuation.*

* CMM value is only 80.6% of HMO value:

$$\frac{\$741}{\$919} = 80.6\%; \qquad \frac{\$1111}{\$1378} = 80.6\%$$

3-PART ELIGIBILITY TEST

If NHCE enrollment is less than 80%, the group must perform the 3-Part Eligibility Test. Since all are eligible for either plan, NHCE meet all eligibility and benefit requirements of these tests assuming no discriminatory provisions favoring HCE.

BENEFITS TEST

When there is one plan with the same value, the simple benefit test can be applied; otherwise a complex benefits test must be applied. In the sample group, the complex benefits test will be required for the AAA valuation, while the simple benefits test will be required for the IR valuation.

SCENARIO II: CMM AND HMO CHOICE (Continued)

	EMPLOYEE (EE)			DEPENDENT (DEP)		
	Enrolled	Includable	Value*	Enrolled	Includable	Value*
HCE-CMM	20	25	741	15	20	1111
HCE-HMO	5	25	919	5	20	1378
NHCE-CMM	63	100	741	35	70	1111
NHCE-HMO	12	100	919	15	70	1378

* AAA Employer-provided values, IR values are same for both Plans -- $750 EE and $1100 DEP.

COMPLEX BENEFIT TEST (FOR AAA VALUATION)

EE: $\left[\frac{63}{100} \times 741 + \frac{12}{100} \times 919\right] \geq 75\% \left[\frac{20}{25} \times 741 + \frac{5}{25} \times 919\right]$

$577.11 $\neq$ $582.45

Taxable income for each HCE is $5.34

DEP: $\left[\frac{35}{70} \times 1111 + \frac{15}{70} \times 1378\right] \geq 75\% \left[\frac{15}{20} \times 1111 + \frac{5}{20} \times 1378\right]$

$850.79 $\neq$ $883.31

Taxable income for each HCE with DEP is $32.52

SIMPLE BENEFIT TEST (FOR IR VALUATION)

EE: $\left[\frac{75}{100} \times 750\right] \geq 75\% \left[\frac{25}{25} \times 750\right]$

$562.50 = $562.50 Passes Test

DEP: $\left[\frac{50}{70} \times 1100\right] \geq 75\% \left[\frac{20}{20} \times 1100\right]$

$785.71 $\neq$ $825.00

Taxable income for each HCE with DEP is $39.29

MR. HARRY L. SUTTON, JR.: Do you see larger employers backing away from flexible benefit programs, reducing the number of HMOs they do business with, or perhaps asking their HMOs to have identical benefit plans, to eliminate or facilitate the aggregation process or minimize the complexity of the actuarial calculations for Section 89 testing?

MR. MODEL: Apart from the financial and computational issues, many of our clients are attempting to reduce the number of HMOs they offer from an administrative standpoint. We also see a trend towards dealing with HMOs on an equal contribution for equal benefits basis. Employers are moving from flexible benefit programs to managed care. If we view managed care with point of service choice as ultimate flexibility, managed care will replace some of the flexible benefits plans. The financial issues are not necessarily the driving force here.

MR. WOJCIK: I believe the Technical Corrections Act states that HMOs with the same level of employer contribution would be treated as equal HMOs and therefore could be aggregated.

MS. JEAN M. WODARCZYK: When Section 89 first appeared, I heard there were several employers considering a political move to try and get the IRS to go ahead and tax on the full value of these benefits. Thereby the IRS looks like the bad guy and the employers do not have to go through the valuation exercise. I am wondering if anybody else has heard about this or if anyone believes the IRS may ultimately move in that direction.

MR. WOJCIK: There is an employer penalty for not reporting taxable income to the HCE. This penalty is at the highest tax rate which is currently 28%.

MS. WODARCZYK: There would not be any reporting if the benefits are automatically taxable, so there would not be any employer penalty.

MR. WOJCIK: I believe that having the employees taxed on the full value of their benefits would lead to administrative nightmares for the employer. This seems like a high price to pay to avoid the valuation exercise.

MS. WODARCZYK: The alternative is to increase the price of your product to cover the cost of doing the valuation exercise.

MR. WOJCIK: I might add one thing regarding Section 89 valuation. The groups that have flexible benefit plans are probably more capable of collecting the necessary statistics than the smaller groups without flexible benefit plans, because their data systems have already been set up.

MR. SUTTON: Suppose you have an Allied Signal type plan with a choice of 100% benefits from an HMO, or a $200 deductible 80%/20% plan. How do you price that choice?

MR. MODEL: We put the highest value on it because it is the employee's choice whether to take the lower value plan.

MR. SUTTON: So essentially it would be the HMO value as the highest price.

MR. MODEL: We do the same thing for PPOs, even though they restrict benefits. As a matter of fact, if you do not go to the PPO provider, you get a reduction in benefits or have to pay out of pocket. We have decided that you will receive the full value of whatever the PPO benefits afford.