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PREFERRED PROVIDER ORGANIZATIONS (PPOs)

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- A review of experience under PPOs
- Measuring the success of PPOs
- Have PPOs reduced employer health care expenditures?
- Employee utilization of PPOs
- The future of PPOs

MR. JAMES GALASSO: A simplified version of history suggests that the 1950s and 1960s were characterized by higher benefit demands by employees which were readily accommodated by their employers. During this time, insurers generally assumed all the health care risks with employers possibly sharing in years with favorable financial experience but being shielded against adverse financial experience in years where claims were extraordinarily high. As inflation heated up in the 1970s and interest rates began to skyrocket, an interesting phenomenon began to unfold. Specifically, as health insurance losses continued to mount, and employers began demanding greater access to their funds, insurers began accommodating the employers' requests by releasing monies being held for unpaid claim liabilities via arrangements such as deferred premiums, contingent premiums, minimum premium plans, and so on. At the same time, both employers and insurers began losing confidence in the insurer's ability to control health care claim costs. While different scenarios can be used to explain the rationale, both employers and insurers began entering arrangements whereby the insurance risk was transferred from the insurer to the employer. Thus we saw a rapid deterioration in one of the major functions of insurance companies, and third party administrators (TPAs) and administrative services only (ASO) plans began to flourish. In the early 1980s, accelerating claim costs continued, and employers came to the realization that cash-flow savings and acceptance of the insurance risk were not the panaceas for rising health care costs. In addition, government, individuals, and labor all began demanding and acting out various approaches to containing health care costs. So cost containment, cost management, managed health care, or whatever we are calling it has become the priority in the health care industry. Prior to the 1980s, health

insurers and employers paid for health care services in a largely uncontrolled fee-for-service environment without regard to quality of care, quantity of services provided, or access to providers. In today's environment, employers, insurers, and employees themselves are making decisions which impact on the quality, quantity, and choice of both the provider of care and the setting in which such care is delivered.

Who Are the Players?

1. Governments--Both Local and Federal--In addition to responding to traditional vested interests, we are seeing various state governments and the federal government imposing more regulatory decisions in an effort to control costs. Whether it be state regulated hospital rate setting or federal legislation requiring health maintenance organization (HMO) entry into employer groups, we are seeing governments more active in attempts to control health care costs as opposed to restricting their attention to providing unlimited access to the health care delivery system. Perhaps no change has had a more dramatic impact on the health care delivery system since the introduction of Medicare as has the implementation of the diagnostic related group (DRG) prospective payment reimbursement system initiated by the Medicare program in 1983.

2. Business--The huge health care cost increases of the late 1970s and early 1980s inevitably have led to employers demanding major changes. Employer coalitions have been formed and increased demands for effective cost containment programs by insurers or other TPAs are being mandated.

3. Labor--For the first time since health care coverage became a collective bargaining issue, we are now seeing unions willing to negotiate for lower benefits or alternative health care delivery systems at the bargaining table.

4. Individuals--A profound change in individuals' attitudes has also become evident in the marketplace. Given a choice between higher cost sharing and limited access to the health care delivery system, individuals appear more willing to accept a managed health care delivery system with limited access to providers.

5. Medical Providers--While strongly resistant to changing the traditional health care delivery system when change first became evident, more medical providers are beginning to accept the fact that change is occurring at a revolutionary pace, and providers themselves are becoming competitors in developing alternative health care delivery systems.

6. Third Party Payers--It is also becoming obvious that a third party payer can no longer survive in the health care financing system as the most efficient funnel for spending employers' funds. We are not only being permitted but, in fact, are being required to intervene in the health care delivery system itself and make tough decisions regarding quality of care, quantity of services, and

access to providers. That is, we can no longer remain concerned solely with the financing of health care but, rather, must become involved in the delivery of that care as well.

Summary

The environmental impact on those involved in health care delivery and the reactions to environmental changes have resulted in the development of alternative health care delivery systems and the offering of various options to employers and/or employees.

What Are the Characteristics of Available Options (Traditional, HMO, and PPO?)

Traditional health care with various benefit options is generally characterized as providing high or unlimited access to the health care provider community with virtually no control over the cost of providing that care. The introduction of HMOs as an option within an employer's benefit package provided limited access to the provider community with a much higher degree of control over resulting costs. Between these two financing and delivery systems, we are seeing what is generally referred to as a preferred provider organization. The exact nature of these PPOs vary substantially from company to company. In general, however, PPOs are regarded as providing a somewhat limited access to the health care provider community but not as limited as with the case of an HMO. Similarly, the cost controls of a PPO are somewhat less than the controls inherent in most HMOs but are significantly higher than most cost controls in traditional health care packages. Figure 1 summarizes these options.

FIGURE 1

	Access	Control
Traditional Health Care	High	Low
PPOs	Medium	Medium
HMOs	Low	High

What Are Some Employer Considerations?

While claim cost control has become the predominant employer concern of the 1980s, many other employer considerations must be taken into account when designing a benefit package with possible optional offerings. The primary purpose for offering health care protection is for employee relations purposes. In this regard, employees are becoming more receptive to managed health care delivery systems and seem to greet choices or available options with enthusiasm. In addition to aggregate claim cost control, employers must also be concerned with the level of premium requirements for each health care offering and the distribution of dollars with respect to the various programs included in an employer's health care package. Employers must also be cognizant of the risks involved with each program and the financial funding

arrangements. In addition, optional programs are inherently more complex to administer, and insurers must be capable of supporting employers' needs in this regard. Complex regulatory issues, such as HMO mandates, mandated benefits, and community rating requirements, must all be considered in evaluating the overall attractiveness of a program. Finally, one of the main issues regards adverse selection amongst optional offerings or "intelligent employee choice."

Intelligent Employee Choice at Blue Cross and Blue Shield of Florida

In January 1985, Blue Cross and Blue Shield of Florida offered a "Triple Option" to our employees. That is, we offered our HMO, our PPO, and our traditional fee-for-service health care programs. After the offering, we conducted a selection study to determine the degree of "intelligent employee choice." Since we had conducted similar studies for other groups offering optional programs, we were not surprised at the outcome of the study, but nevertheless, we are still faced with an issue which almost certainly will require that some future action be taken to avoid a serious disruption in our total health care package. The study indicated that for the year prior to any optional offering being available, those who ultimately selected the HMO offering had claims costs 25 percent less than the claim costs for our entire employee population (see figure 2).

FIGURE 2

INTELLIGENT EMPLOYEE CHOICE
BLUE CROSS AND BLUE SHIELD OF FLORIDA

	Employee Experience			
	HMO	PPO	Traditional	Total
Preselection Claim Costs	$841	$1,029	$1,199	$1,114
Percentage Selecting	11%	28%	61%	100%
Selection Factor	(25)%	(8)%	+8%	...

For PPO enrollees, the claim costs prior to enrolling in the PPO were approximately 8 percent less than that for the entire employee population. Thus, with 11 percent of our employees opting for our HMO and 28 percent opting for our PPO, the employees remaining in the traditional program had experienced claim costs 8 percent higher than that for the entire employee population in the year prior to our making this offering. Translating this into dollar terms and, as is often the case, assuming that employer contributions for all options will be set at that required for our traditional program, we can expect to pay approximately $400,000 more in additional claim costs than would have been the case had we not offered any options. That is, our overall claim costs for our entire health care program would increase by about 8 percent (see figure 3).

FIGURE 3

INTELLIGENT EMPLOYEE CHOICE
BLUE CROSS AND BLUE SHIELD OF FLORIDA
EMPLOYEE AND DEPENDENT CLAIM COSTS

Without Options	$ 4.8 Million
With Options*	5.2 Million
Additional 1st Year Cost	$0.4 Million (8.0%)

*Assumes employer contributions set at traditional claim cost requirements for all options.

Intelligent Employee Choice for a Large Florida Group

We conducted a similar study for a large Florida group which offered its employees both an HMO and a traditional fee-for-service program. In the first year, approximately 5.5 percent of the employees selected the HMO. Those employees who selected the HMO had claim costs 44 percent lower than the average claim cost for all employees prior to the offer. This resulted in an increase in the per-employee claim cost for the traditional program of approximately 2.6 percent (see figure 4).

FIGURE 4

INTELLIGENT EMPLOYEE CHOICE
LARGE FLORIDA GROUP

	Employee Experience		
	HMO	Traditional	Average
Preselection Claim Costs	$225	$468	$457
Percentage Selecting	5.5%	94.5%	100%
Selection Factor	(44.1)%	+2.6%	...

Much of the rationale for this selection phenomenon is believed to be caused by younger employees opting for the HMO. Accordingly, we wanted to test how much of this selection we could directly attribute to such demographic factors. This was especially important to us since we had assumed that some form of age rating may help to avoid the type of selection that was occurring. Unfortunately, when we broke the employees down by age categories, we found that, within every age category, those employees opting for the HMO had significantly more favorable experience than those not opting for the HMO. It appears that the selection is much more attributable to such factors as physician loyalty and established physician relationships than to demographic considerations. That is, employees with such physician relationships tend to have significantly higher claim costs and are not as willing to switch physicians or restrict their access to the delivery system. When

we broke down the 44 percent selection for this large Florida group, we found that about 9.2 percent was attributable to age selection and 38.4 percent was attributable to "other" selection. This is causing us to rethink potential solutions to this selection issue (see figure 5).

FIGURE 5

INTELLIGENT EMPLOYEE CHOICE
LARGE FLORIDA GROUP

	Employee Experience	
	HMO	Traditional
Age Selection	(9.2)%	+ 0.6%
"Other" Selection	(38.4)%	+ 2.0%
Total Selection	(44.1)%	+ 2.6%

What Are Some Employer Cost Variables?

In attempting to address the selection issue as well as other employer considerations in developing a health care program, we look at what is controllable and what is largely uncontrollable. For example, the distribution of an employee population with respect to age, sex, occupation, family status, health history, and geographic area are largely uncontrollable but can be addressed or possibly impacted via a rating strategy. More controllable areas include such things as:

1. Benefit Design--We believe benefit design is an important consideration in both developing a viable health care program, which meets employees' needs, as well as in helping resolve the selection issue. History has proven that high benefits tend to both attract high utilizers and encourage utilization in general. Since HMOs tend to emphasize preventive care and offer rich benefit packages, lower benefit traditional programs may help mitigate the selection problem.

2. Rating/Funding Design--Insurers must talk to employers in terms of the overall cost of their health care programs. Employers are beginning to realize that savings in one option of a health care program may be resulting in higher costs in another option with no or possibly negative overall savings.

3. Medical Care Price Controls--The successful insurer must be in a position to negotiate attractive pricing arrangements with a network of providers.

4. Medical Care Utilization Controls--The more stringent the price controls that are in place, the more stringent the utilization controls must be. It does no good to negotiate a 25 percent discount if utilization should happen to concomitantly increase at an offsetting rate.

5. Employee Lifestyles--Consistent with the concept of preventing claims from occurring as opposed to limiting payments once a claim occurs, wellness programs appear to be successful in many areas of the country. Of course, it is extremely difficult to quantify such savings.

6. Intelligent Employee Choice--Benefit design, funding arrangements, and possibly joint venturing or coinsuring may help mitigate this serious problem.

7. Administrative Expense--Administering multiple option programs can be complex and expensive, but administrative expense, contrary to what was the case in the 1970s, is not the prime concern in today's environment. Overall control of an employer's claim costs must remain top priority and is certainly being given the greatest attention by today's employers.

MR. THOMAS L. HANDLEY: Blue Cross and Blue Shield of Kansas City began putting its PPO together in mid-1983 and began marketing it in November 1983. While it consisted of providers from the Kansas City metropolitan area, we did market it to areas outside Kansas City with some additional rate discount since those subscribers would be coming to Kansas City for some of their more complex treatments. We had both hospitals and physicians under contracts as preferred providers. Both had to meet certain conditions to become preferred providers.

Hospitals

We sent a request for proposal (RFP) to all hospitals in the Kansas City metropolitan area which contained the conditions they needed to meet to become a preferred provider. They had to:

1. provide a discount off billed charges of at least 10 percent (currently Blue Cross and Blue Shield receives an average of 5 percent.);

2. conduct preadmission and concurrent review of inpatient cases; and

3. hold the subscriber harmless if we later determined all or any part of an admission was medically unnecessary.

We received responses from all but four hospitals. To guide us in determining the preferred hospitals, we established a point system, of which half were allocated to price and half were allocated to services. We ended up selecting 12 hospitals (from a total of 28 in the area) which gave us an average 17 percent discount and which had 53 percent of the admissions before the PPO.

Physicians

We did not use an RFP to select physicians. We gave all of them a chance to join if they were willing to meet the following conditions:

1. Agree to accept reimbursement for services equal to billed charges but not to exceed our maximum fee of 20 percent below our customary fee level;

2. Agree to precertify admissions;

3. Agree to hold subscriber harmless if we determined that a service was medically unnecessary.

The final contracting process resulted in approximately 50 percent of the physicians signing (1,200) with good representation among all specialities and preferred hospital staffs. We estimated that the maximum fee level of 20 percent below customary gave us an additional discount of 11 percent.

Experience Results

Slide 1 shows several items worth noting from the first year:

1. The PPO utilization at PPO hospitals was lower than the same values for non-PPO hospitals and non-PPO cases at PPO hospitals.

2. Some of the lower utilization for the PPO hospitals may have been due to the fact that the groups that bought our PPO program were groups with lower utilization anyway.

3. Because of the benefit differential between preferred and nonpreferred providers, there was a significant shift to preferred providers, even more than assumed in the rates.

4. It is disturbing to note that the admission rate increased for the PPO groups but went down for the company in total. This may be due to the smaller data base of PPO groups, so we could have a statistical fluctuation normally expected from small data bases.

From slide 2 for the second year, we had observed that:

1. PPO utilization and costs continue to be lower than those observed for the total company.

2. The PPO hospitals are definitely the higher charges, and it is important that we maintain a high level of discount to be competitive rate-wise.

Marketing

Our initial marketing effort was based on three key assumptions:

1. The program would not be marketed as an optional program (such as HMO) but would be the group medical program offered by the employer.

PREFERRED PROVIDER ORGANIZATIONS

SLIDE 1

EXPERIENCE FOR FIRST YEAR - 1984

BLUE CROSS AND BLUE SHIELD OF KANSAS CITY

I. HOSPITALS--Inpatient:	ALOS	CHARGE PER CASE
PPO Hospitals--PPO Cases	5.5	$3,264
--non-PPO Cases	7.0	4,168
PPO vs. non-PPO	-27%	-28%
non-PPO Hospitals	6.48	3,817
PPO Cases vs. non-PPO Hospitals	-15%	-14.5%

II. PPO GROUPS:

	1983 (PRE-PPO)	1984 (POST-PPO)	PERCENT CHANGE
Admission Rate per 1,000	101	113.5	+12.5%
Average Length of Stay	5.37	5.28	- 1.7%
Days per 1,000	546	609	+11.5%
Charge per Case	$3,158	$3,053	- 3.3%
PPO Hospitals--% of Cases	53%	72%	+36.0%

III. TOTAL COMPANY:

	1983	1984
Admission Rate per 1,000	129	120
Average Length of Stay	6.13	4.17
Days per 1,000	792	739
Charge per Case	$3,023	$3,473

OPEN FORUM

SLIDE 2

EXPERIENCE FOR SECOND YEAR

BLUE CROSS AND BLUE SHIELD OF KANSAS CITY

CLAIMS PAID FIRST 8 MONTHS--1985

I. PPO GROUPS:

	PPO HOSPITALS	NON-PPO HOSPITALS
Average Length of Stay	6.29	6.30
Charge per Case	$4,033	$3,852
Benefits per Case	$2,905	$2,627

II. TOTAL COMPANY:

	PPO HOSPITALS	NON-PPO HOSPITALS
Average Length of Stay	6.79	6.18
Charge per Case	$4,350	$3,983
Benefits per Case	$3,377	$3,255

III. PPO VS. TOTAL COMPANY:

	PPO	TOTAL COMPANY	PPO VS. TOTAL
Admission per 1,000	84	115	-27.0%
Days per 1,000	477	726	-34.3%
Charge per Case	$3,538	$3,793	- 6.7%
Benefits per Case	$2,544	$3,033	-16.1%

2. The nonpreferred benefit level would be 20 percent below the preferred benefit level (i.e., if preferred equaled 80 percent, then nonpreferred equaled 64 percent).

3. We offered the employer a rate discount (averaged 15 percent) rather than providing higher benefit levels at preferred providers for the same rate by keeping our preferred coinsurance level at 80 percent.

About six months after introducing the PPO to group business, we came out with a product for the individual medical market. This individual product has done quite well.

After our first year, we assessed marketing results and while we were reasonably successful, we became concerned about:

1. the market share of the PPO;

2. preserving our discount at preferred hospitals; and

3. the number of competitive PPOs coming into our market.

It became apparent that the 20 percent benefit differential was too much, especially since the standard preferred coinsurance level was 80 percent.

The following changes have been made in the product design to enhance the marketability of the PPO.

1. The standard coinsurance option is now 90 percent for preferred and 80 percent for nonpreferred.

2. The preferred level of benefits would be added on top of the existing comprehensive Major Medical at no increase in rates. Therefore, the PPO would essentially become our basic means of providing coverage.

3. We had increased our efforts on preadmission certification in an effort to lower utilization and offset the higher coinsurance.

4. We had added a prescription drug copayment benefit (via Pharmaceutical Card System of Arizona) at no increase in rates.

5. We had begun marketing it as a dual option in selected groups.

We this new strategy, we anticipated that 80 percent of all Blue Cross and Blue Shield enrollment would be in the PPO by the end of 1986.

MR. RONALD G. HARRIS: The term PPO is not well-defined. It's not consistently defined from area to area or from plan sponsor to plan sponsor. Perhaps the only characteristic of PPOs that is fairly uniform is the presence of financial incentives for employees to use so-called preferred providers, typically through differentiated benefits from those

provided by preferred hospitals and physicians and those provided by other hospitals and physicians.

Beyond this single characteristic that most PPOs share, we find that PPOs can range all the way from programs that look much like individual practice association (IPA) arrangements to those that I would characterize as fairly simple discounted fee-for-service arrangements. Of course, there are a lot of variations in between. It's important that we recognize this lack of uniformity among PPOs because we have to be careful not to generalize too much from any one situation or the experience of any one of the PPOs.

It may be worthwhile as we think further about this issue of selection in PPOs to try to get behind what might be driving that selection, and to do so, it's worthwhile to follow-up on some of the points regarding selection patterns of HMOs and try to understand better why those occur.

Most alternative delivery systems (ADSs) and traditional insurance experts appear to agree that better than average risks tend to be attracted to an HMO (although examples to the contrary can be cited). This favorable selection most often results from a number of natural forces, as well as any HMO target marketing efforts. These include:

1. an individual's predisposition toward change (attracting young, vibrant lives not anticipating significant immediate medical needs),

2. the prospect of changing physicians (eliminating attraction for an individual with a strong existing physician relationship, especially an individual with a medical history), and

3. the orientation of most HMOs toward primary care physicians (eliminating attraction for an individual who regularly uses a specialist).

For a given employee group, then, the result of some employees electing coverage through an HMO tends to be the development of a selection spiral against the traditional coverage program. The result of such a process of antiselection is a continuing escalation in the cost of and the rates for traditional coverage.

The relative newness of most PPO programs makes any generalization as to selection pattern tendencies relatively hazardous at this time. Certainly many of the features which tend to help produce favorable selection for an HMO--such as the prospect of changing physicians--are present in a PPO as well. However, many PPOs have features which may not produce favorable selection--such as greater emphasis on hospitals and physician specialists.

A final point should be considered, regarding selection patterns. As competition increases and the proportion of physicians participating in one or more ADS programs grows, the selection characteristics from each successive ADS enrollment campaign within an employer group are likely to be progressively less favorable. I have observed this result

within two of my HMO clients, and I have some concern about the implications for both traditional programs and HMOs/PPOs, as ADS penetration increases to relatively high levels.

A. ADS Design and Risk Selection

The benefit designs offered by most PPOs generally are structured in a fashion similar to traditional coverage. This permits relatively easy coordination with a particular employer's traditional coverage, enabling differentiation between programs on the basis of either price or benefits. Price differentiation can be achieved by offering the same benefits under the PPO as under traditional coverage, but at a lower rate. Benefit differentiation between the PPO and traditional coverage can be achieved by pairing options which have the same actuarial cost, with cost savings under the PPO passed along to the employee in the form of additional benefits. A mixture of price and benefit differentiation is possible, as well.

Chart 1 provides a simplified illustration of a benefit design with price differentiation and one with benefit differentiation. For these purposes, both the traditional program and preferred provider services under the PPO have been assumed to be structured as Comprehensive Major Medical plans with identical coinsurance percentages. The sole benefit distinction between the traditional plan and the PPO, so long as preferred provider services are used, is the amount of the front-end deductible.

CHART 1

SIMPLIFIED ILLUSTRATION

PPO AND TRADITIONAL COVERAGE COST FACTORS

	PPO PROGRAM			TRADITIONAL
DEDUCTIBLE	BENEFIT FACTOR	PERFORMANCE FACTOR	PPO IMPACT FACTOR	BENEFIT FACTOR
$100	100%	85%	85%	100%
200	92	85	78	92
300	87	85	74	87
400	83	85	70	83
500	79	85	67	79

In columns two and five of chart 1, the item labeled benefit factor is simply an index value that represents the relative benefit value as the deductible increases. So we would find, for example, that a $300 deductible would have a price that's 13 percent lower than the price for

a $100 deductible, given the coinsurance value is the same and given roughly the same out-of-pocket limitations. You'll find the same set of numbers as benefit factors under PPO as you find under traditional coverage. One might argue with that assumption, but for illustrative purposes, we will use it.

The column labeled as the performance factor reflects the price and any utilization control savings that we expect to achieve through the PPO, and in this particular example, we assume this combines to 15 percent. The composite of the benefit factor and the performance factor produces what is labeled as the PPO impact factor. Along the second row, the product of 92% x 85% is 78%.

An example of price differentiation is to compare the PPO impact factor to the traditional benefit factor in row one of chart 1. Here the benefits are essentially the same, and we have a 15 percent difference in price. An example of benefit differentiation is to look for a pairing between the PPO benefit level and the traditional benefit level that will have the same price relativity. In this particular example, a $200 deductible PPO program would have the same expected net claim cost, given the same selection characteristics of the people enrolling in that program, as a traditional program with roughly a $500 front-end deductible.

The next two charts illustrate a hypothetical, but what my experience suggests to be a relatively common, sequence of events in the group health insurance market. Unfortunately, the unusual secular price and utilization trends during the past 5 years have made any sort of aggregate analysis or validation nearly impossible, and individual case studies tend to be anecdotal and may not be representative.

Chart 2 illustrates the sort of effect that the introduction of, say, a freestanding HMO can have on the financial results for a group program. To the extent that such an HMO attracts a disproportionate share of favorable risks in the group--by virtue of age distribution, health status, or other characteristics--financial results for the traditional program deteriorate accordingly. This leads to the need for higher rates under the traditional program.

Chart 2 shows a mix of enrollment percentages by program and a morbidity factor to reflect the characteristics of those individuals enrolling in the program. As this example shows, they have to weight across to a composite of one. The performance factors reflect exactly the performance factors used on chart 1, giving those savings that can be achieved through a combination of price and utilization controls. Benefit increase in this example reflects the fact that HMOs typically offer additional benefits. The bottom line impact is the expectation that the cost would be the same under the HMO program as under the traditional program assuming that the same individual is enrolled in each.

If we multiply the morbidity factor times the impact factor, we obtain a cost measure term which differs substantially between the two programs. A pricing index equal to the cost index under the current

CHART 2

MULTIPLE OPTIONS SELECTION MODEL

SCENARIO: COMPETING ADS ONLY

		Sponsoring Carrier				Competing
	Current	HMO	PPO	Traditional	Total	ADS
% Enrollment	100%	0%	0%	90%	90%	10%
Morbidity Factor	1.000			1.033		0.700
Performance Factor	1.000			1.000		0.850
Benefit Increase	0.000			0.000		0.150
Impact Factor	1.000			1.000		1.000
Cost Index	1.000			1.033		0.700
Pricing Index	1.025			1.025		1.025
Net Gain/Loss	0.025			-0.008		0.325
Employer Contrib.	0.750			0.750		0.750
Payroll Deduction	0.275			0.275		0.275

program plus a modest profit contribution shows that one program has a substantial gain while the other program has a substantial loss.

In chart 3 we add another dimension by filling in some of the intermediate columns, assuming that a carrier is offering its own HMO and PPO programs. The PPO option included in this illustration is assumed to be one that's differentiated on the basis of price so that if you look at the pricing index, you'll find that the price for the HMO, the traditional plan, and for the competing alternate delivery system is 1.025, while the PPO has been discounted 10 points. If you back up that chart to the performance factor, you'll find an assumed 10 percent savings with regard to price and utilization under the PPO. This price differentiation is reflected in a payroll deduction or lower price to the employee.

This form of marketing differentiation is likely to attract two basic types of risks:

1. employees currently using preferred providers, and

2. employees without an existing relationship to any particular provider group (representing, in most instances, a favorable selection of risks).

The second type of risk is attracted to the PPO option solely by virtue of its reduced cost, with no perceived loss in value. The third category of risks in a group is composed of employees currently using nonpreferred providers. This category is unlikely to be particularly attracted to the PPO, because of the perceived loss in value resulting from having to terminate existing provider relationships. Hence, the PPO can be expected to attract a disproportionate share of healthy lives when it is sold strictly on the basis of lower cost to the employee.

If you look at net gain or loss on chart 3, you'll see some fairly interesting results, particularly if you think back to what was on chart 2. The composite for the sponsoring carrier is a loss of 1.1 percent. That is slightly greater than the loss we saw in chart 2. In other words, one could argue that, with regard to financial results, it is better to have done nothing than to have introduced a program such as this. The reason for this is fairly simple. If you look at the PPO column, you'll find that for every employee that enrolled in the PPO, we were willing to reduce the average revenue that we charged for that employee by 10 percent. However, by virtue of the risk characteristics of those individuals who elected to enroll in the PPO, the amount we saved was not 10 percent of the average. It was 10 percent, in this particular illustration, of the lower expected cost for those people enrolling in the PPO. In other words, given that they were at a morbidity factor of 90 percent, we effectively saved 9 percent of the average cost per employee, yet we reduced our premium by 10 percent. So the bottom line consequences suffer accordingly. Given all of this, what do we do about it?

B. Multiple Options Program Strategy

The realities of the group market are forcing the availability of individual choices among health programs. This pattern is likely to intensify rather than abate. The expected result is an uneven distribution of risks among health coverage alternatives.

In the absence of coordination, each health coverage alternative will be priced independently without consistent recognition of the selection effects produced by the presence of the other alternatives available. The result is likely to be a mixture of over and underrating of specific alternatives, producing (1) short-term windfall gains for the sponsors of some alternatives, (2) short-term losses for the sponsors of other alternatives (traditional coverage, in particular), and (3) long-term increased cost for the employer. This last consequence follows from a combination of the self-correcting nature of experience-rating formulas and the tendency of effective ADS programs to add benefits (to make member enrollment attractive) rather than reduce rates to the employer and maintain modest benefit levels.

The most promising approach to dealing with this matter is one in which a carrier (or TPA) offers a carefully designed and priced

CHART 3

MULTIPLE OPTIONS SELECTION MODEL

SCENARIO: UNCOORDINATED PRODUCT RESPONSE

		Sponsoring Carrier				
	Current	HMO	PPO	Tradi-tional	Total	Competing ADS
% Enrollment	100%	10%	30%	50%	90%	10%
Morbidity Factor	1.000	0.700	0.900	1.180	1.033	0.700
Performance Factor	1.000	0.850	0.900	1.000		0.850
Benefit Increase	0.000	0.150	0.000	0.000		0.150
Impact Factor	1.000	1.000	0.900	1.000		1.000
Cost Index	1.000	0.700	0.810	1.180	1.033	0.700
Pricing Index	1.025	1.025	0.925	1.025	0.992	1.025
Net Gain/Loss	0.025	0.325	0.115	-0.155	-0.011*	0.325
Employer Contrib.	0.750	0.750	0.750	0.750		0.750
Payroll Deduction	0.275	0.275	0.175	0.275		0.275

*Ignores any sharing of gains with providers under the HMO or PPO.

package of health care alternatives. Such a package may range from two options (for example, traditional coverage and HMO or PPO coverage) to a larger number of options. There would be some key elements:

1. Distinction among alternatives should be based largely on benefit differences, rather than price differences. Ideally, prices would be the same among options with benefits presenting the major distinction.

2. The highest level of benefits should be available through the alternative with the most effective cost controls, and conversely. This typically means that HMO benefits would be the richest of the alternatives and traditional coverage benefits the weakest.

3. An effective promotional thrust in the marketplace would be necessary to communicate the cost advantages to employers of a single financial and risk manager.

The specific design and pricing strategy to be adopted for such options must necessarily reflect the characteristics of the market segment to which it is to be applied. Underwriting considerations will be important, for example, in the small group market, and financing arrangements (e.g., contingent premium, partial self-funding, and ASO) will be important issues in the large group market.

C. Evaluation and Future of PPOs

If the trend toward multiple-coverage options continues, carriers offering traditional coverage increasingly face two alternative courses of action. First, an insurer may attempt to make traditional coverage available on a dual-choice basis (i.e., nongroup coverage), designed and priced to reflect the fact that true group insurance practices cannot be followed in a multiple- options environment. The second course of action is to design a group program or several programs containing coverage options (traditional, HMO, PPO, and so on), where the benefit levels and pricing structure of the options are carefully designed and coordinated to minimize any adverse effects of individual employee selection of options. This second alternative course of action is the more desirable approach, in my judgment, for both employers and the health insurance industry. However, its success is contingent on the ability of the parties involved to coordinate the design and pricing of all of the employee options within the group.

Large groups are less likely than medium or small groups to be inclined to accept packaged or coordinated options, based on my experience. Frequently they have unique benefit, administrative, or financial features in their health programs. Benefit change decisions typically are not made quickly and are not easily influenced. Perhaps most significantly, ADS programs are already present in most cases. However, a number of major U.S. employers have taken steps in the direction of coordinating or controlling ADS program benefits and rates and in the direction of adjusting for certain selection patterns (most notably, age/sex specific rates to ADS programs, based on actual demographics). I anticipate that such actions will become more prevalent.

I foresee three major areas of change over the next 2-3 years with regard to PPOs specifically. First, I do not expect to see simple discounted fee-for-service PPOs grow significantly as a major competitive force in the health care field--at least not in most areas of the country. Second, I expect to see a continuing growing emphasis by PPOs on management of medical care--both through primary care physician networks (i.e., the physician gatekeeper approach) and, more importantly, through increasingly sophisticated patient care management programs (i.e., case management upon entering the secondary and tertiary levels of the health care system, rather than at the primary care level).

Third, and consistent with the first two expectations, I foresee further risk transfer for price and utilization control performance under PPOs to the participating hospitals and physicians. By so doing, employers and carriers or other sponsors will have converted a monetary financial risk they now bear (i.e., the payment of medical service fees) into a performance and professional time or bed-day risk to be borne by contracting providers. In particular, I would expect to see tertiary and specialty hospitals, along with their medical staffs, increasingly involved in establishing delivery networks and feeder systems--willing to accept the financial risk transfer in return for market share. Such an approach goes well beyond simple fee discounting.

In evaluating the performance of PPOs, we, as actuaries, face a significant challenge. We must be careful to recognize important considerations such as risk selection among employees electing a particular PPO option, the absence of comparative benchmarks (control groups), the growing complexity of risk arrangements, and the tremendous diversity in specific PPO features. Perhaps our most important challenge will be to develop the sort of measurement and information systems necessary to monitor and evaluate these complex ADS systems which link together the financing and delivery of health care.

MR. FRANCIS E. KEENAN: I would like to describe the results of one particular PPO experiment that was organized and designed at Metropolitan Life Insurance Company. The data that I am going to share with you will provide some important insights into the operations of a PPO and should help you answer an important question: are PPOs a success? In order to put these results in the proper perspective, however, it is essential that we review certain background information. At the outset, let's look at the nature of the PPO. Although it is difficult, if not impossible, to define what one might call a generic PPO, we can be very specific and concentrate on the model used by Metropolitan simply because we are concerned with results obtained with this model.

Metropolitan's approach requires that the PPO has some specific characteristics, and these are best outlined by considering the process we follow in establishing our PPOs. First, our selection process is designed to enroll only the most efficient providers as our participants. We start by selecting a geographic area which contains a large concentration of insured employees, so that we control a significant share of the market. This enhances our ability to negotiate with the providers. Once we have selected the geographic area, we analyze the Metropolitan claim data from the hospitals in the area. Based on a comparative analysis by our subsidiary, Corporate Health Strategies, we isolate the most efficient hospitals. Then we divide the area into local service areas which are defined so that one provider hospital can service each local area. Next we select the most efficient hospital within each local service area. At this point, we approach each of these selected hospitals and negotiate discounts. In practice, this will be an iterative process--we may have to go through the loop a few times in order to obtain satisfactory participation on the part of the efficient providers.

Once we have made a deal with a hospital, we approach the physicians affiliated with the group of efficient hospitals. Clearly, it is this group

of physicians who are responsible for the results that we observed in our analysis of the hospital data--they created our efficient hospitals, and we want them as participating providers. Concurrent with this negotiating process, a mechanism for directing the employees to our preferred providers must be designed. This is accomplished via the reimbursement formula. We adjust the reimbursement formula of the plans covering the employees in the area, so the individuals will have a financial incentive to utilize the preferred providers. Note that, in this model, the employee is not locked in; he has the option of using any provider. Finally, we install our utilization review program. This is a very important part of the process, and if the PPO is to produce the desired savings, it is essential to have a comprehensive and strict utilization control program in place.

Diagram 1 gives a list of the items just mentioned:

DIAGRAM 1

PPO CHARACTERISTICS

Efficient Providers
Defined Service Areas
Provider Discounts
Incentives for Participants
Utilization Review

This particular PPO was introduced on 1/1/84, and the results represent the experience under one group contract. This group contract covered approximately 15,000 employees and their dependents.

Prior to the implementation of the PPO, the employees had a very rich plan. Hospital expenses were essentially paid in full, surgical expenses were paid according to a schedule, and other medical expenses were paid at 80 percent after a $100 deductible. There was an overall employee out-of-pocket limit of $750. The plan which was installed with the PPO provides in-full payments for all expenses if the services are delivered by preferred providers, but a deductible and coinsurance are imposed when preferred providers are not utilized. This deductible varies with salary but is approximately $200, and the coinsurance is 20 percent. The plan also contains an out-of-pocket feature. This level also varies with salary but averages about $1,000. These plan features are summarized in diagrams 2 and 3.

DIAGRAM 2

PLAN DESIGN BEFORE PPO

Expense	Reimbursement
Hospital	100%
Surgical	Schedule
Other	80%, $100 deductible

DIAGRAM 3

PLAN DESIGN AFTER PPO

Expense	Reimbursement	
	PPO	Non-PPO
All	100%	80%, $200 deductible $1,000 out-of-pocket

Now that we have set the stage, we can get to some results. The results are essentially for inpatient services. I am concentrating on this area because the largest part of the savings originate from the inpatient expenses. The results for the first year of the plan are shown in diagram 4:

DIAGRAM 4

FIRST YEAR WITH PPO

	PPO	Non-PPO	Total
Expenses	$32	$68	$100
Discount	5	-	5
Copayment	-	12	12
Utilization	-	-	4
Net Savings			21

I have normalized the figures so that the savings are shown relative to the total inpatient medical expenses incurred by the employees under this plan. If the total of the inpatient expenses incurred by our group in 1984 was $100, then $32 was for services delivered by the PPO and $68 for services on account of nonpreferred providers. In terms of number of admissions, the PPO had 23 percent of the admissions incurred by our group in 1983, but their market share increased to 38 percent in 1984. The aggregate discount realized in 1984 was 5 percent. This is the amount that the plan saved as a result of the discounts which were negotiated with the providers.

The next item that we should discuss is the copayment or the combination of deductible, coinsurance, and out-of-pocket feature. There is an important question that should be considered here: should we consider the copayment savings arising from the non-PPO expenses as savings to the plan? I feel that these savings were made possible by the introduction of the PPO, for if the employees did not have the opportunity to obtain 100 percent reimbursement via the PPO, it would have been difficult to introduce the copayment features. The implementation of the PPO facilitated the introduction of copayments which generated additional savings for the plan; therefore, it is appropriate

to include the copayment savings as one of the elements which contributed to reducing the cost of the plan. In any event, I have shown various savings items separately so that you can draw you own conclusions. The plan saved 12 percent on account of the copayment feature.

I have measured these copayment savings relative to the PPO reimbursement level and not relative to the reimbursement level prior to the introduction of the PPO. In this particular case, the results would not vary significantly if we changed our point of reference. Furthermore, I feel that is is important to exhibit the results this way because this format provides a simple way to understand the effect of migration on the cost of the plan.

Next we come to utilization--the plan realized a 4 percent savings as a result of lower utilization of services and the migration of the employees to the more efficient providers. This is the net change in utilization, and it is adjusted for the increase in utilization of outpatient alternatives.

On this basis, we have a savings in the first year of operation of 21 percent of total claims submitted. I have tried to simplify the results of this diagram, but we should not lose sight of the fact that this is a complex process involving the interaction of many forces.

When designing a PPO of this type, it is important to consider the magnitude of the provider discount in relation to the magnitude of the copayment penalty for using nonpreferred providers. If the penalty is larger than the discount, the cost of the plan will increase as employees migrate to the preferred providers. If you study the numbers in this diagram, you might conclude that we have not properly balanced the copayment and the discount. The $5 discount is about 16 percent of the $32 of PPO claims, but the $12 copayment savings is in the neighborhood of 17-18 percent of the $68. In the aggregate, however, we have achieved a proper balance because, after we factor in the effect of the efficiencies achieved by our PPO providers, the cost of the plan is virtually independent of proportion of employees using the PPO.

Now I would like to consider the issue of the future of PPOs and their success. Diagram 5 presents figures which I feel demonstrate the success of this PPO.

DIAGRAM 5

FIRST YEAR WITH PPO

	Savings
Expenses	$ 100
Plan Savings	21
Participant Savings	7
Increased Revenue to Preferred Providers	3

The $21 is the total from the last diagram, and I am calling that the savings to the plan. This employee benefit plan saved $21 out of every $100 of medical care expenses. The participants who used the preferred provider saved something because they didn't have to pay the deductibles and coinsurance, and the $7 represents the savings in copayment realized by the people who used the PPO. The third item is the increase in revenue to the preferred providers resulting from the employees shifting from nonpreferred providers to preferred, and this item is $3 on this scale. One of the keys to the success of a PPO is to have these groups emerge as winners. The plan has to save so that the plan sponsor is satisfied. The individuals who we want to utilize the preferred providers have to save something so that they will continue using the preferred providers and move to them. The preferred providers have to get something out of it; they have to get enough increased revenue to offset their discounts. All of this happened during the first year of our plan, which was 1984.

Some preliminary figures for 1985 are given in diagram 6:

DIAGRAM 6

SECOND YEAR WITH PPO

	PPO	Non-PPO	Total
Expenses	$56	$44	$100
Discount	8	-	8
Copayment	-	8	8
Utilization			
Net Savings			

As you can see, the diagram is incomplete. Since we don't have a full year of data, we have not completed the analysis, but you can see a dramatic shift in the utilization of the preferred providers. On the same scale of $100 for the total expenses incurred, we have $56 of expenses incurred with the preferred providers and only $44 with the nonpreferred providers. The discount is $8, and the copayment imposed on the people who didn't use the preferred providers is also $8. Although this diagram is incomplete, the trend is clear. There is a tremendous shift in utilization--participants are migrating to the PPO. In our view, this particular experiment has been very successful. It achieves the results that we wanted it to. The plan is saving. The employees are saving. The providers have a tremendous increase in the market share. The market share of the preferred providers increased from 23 percent prior to the introduction of the PPO to 38 percent in the first year of operation to over 50 percent in the second year. We are very pleased with these results.

MR. CHRISTOPHER H. WAIN: Do you have any estimate of the extra cost of operation for maintaining the preferred provider network as compared to going ahead on the conventional basis?

MR. KEENAN: The extra expense of operating this PPO on an ongoing basis, on this scale where $100 is the total medical care expense incurred, is somewhere between $1 and $2.

MR. DAVID V. AXENE: Mr. Harris, you referred to encouraging people to go to a benefit-based PPO rather than a cost-based PPO. In the things that I have seen, it seems that people react to the out-of-pocket cost first, and so you might be hinting at a way of controlling adverse selection. But doesn't that also negatively affect marketing in that there might be less incentive to choose a PPO from that perspective?

MR. HARRIS: I think that is a good point, and I will simply accept that as a point well taken. Certainly my experience has been that having reduced payroll deduction for a PPO type of program makes it very attractive in the marketplace. On the other hand, it can lead to some fairly severe adverse consequences, and I would argue that we at least need to be aware of that and be thinking about that as we design the products.

MR. ROBERT J. DYMOWSKI: Mr. Keenan, you said this whole program was designed for one large group of about 15,000 employees. What sort of plans do you have as far as replicating that in terms of the product that you would offer to smaller groups?

MR. KEENAN: We are interested in marketing this approach to other groups. We have already developed several other PPOs in other areas. Some of these were operational earlier, and others will be coming on board during the year. We certainly are eager to move ahead with this, and we think it is the wave of the future.

MR. LESLIE STRASSBERG: Mr. Galasso, the experience under the Florida HMO is quite remarkable. Could you please describe the underwriting requirement that you had in effect in order to achieve these substantial cost savings under the HMO? Specifically, I am talking about the requirements as far as permitting an individual to opt into the HMO and also the requirements that you made upon the group in order to qualify for that dual choice offering in the first place.

MR. GALASSO: There are virtually no underwriting requirements on the individual. It is really a sales campaign on the part of our HMO representatives who were invited into each of the groups. This is also what we did with our own group of employees. Most people seem to attribute HMO selection to the inherent reluctance on the part of individuals themselves to switch physicians when they are, in fact, in poor health, and they have established a physician relationship. So, almost by design, they get healthier people. Another thing that is done is to encourage the younger healthier people to opt for the HMO in the sales presentation. They provide things like well-baby care to attract young families. They also respond to questions generally in a fashion which might make the less healthy a little more reluctant to join the HMO. As far as groups, we will offer both our HMO and our traditional package to virtually any large group that comes to us.

There have been times where we have backed out of the traditional program because the selection has gotten so severe.

MS. JOAN P. OGDEN*: As an extension of the underwriting question, if you are offering this as an individual product, is it medically underwritten, or how are you handling the antiselection?

MR. HANDLEY: It is a medically underwritten product. In terms of a preferred provider product, the rating assumption is that somebody is buying the program, and we accept them after they pass the medical underwriting. They are probably going to use one of our preferred providers, so if you look at your rating models and assumptions, you don't anticipate seeing many people using a nonpreferred provider.

MR. JOSEPH J. POPLASKI: Have you noticed claims getting paid any faster due to the fact that you have a streamlined administration system?

MR. KEENAN: I don't have any information on that. I haven't noticed it.

MR. HANDLEY: We keep track of that information, and part of our commitment to the provider in order to get him to sign up was that we would pay claims faster under the PPO arrangement as opposed to our traditional services. We have been paying faster. I don't know if it is because they submit claims faster, whether our system is faster, or whether it's just that we pay more attention to these claims because of the arrangement we have with the providers.

MR. ANTHONY J. HOUGHTON: I have an interest in how coordination of benefits should work when you have plans with penalties or lesser benefits when people choose either not to follow rules or take a non-PPO. I would think it would be in everybody's best interest if they could arrange it without any violation of state laws to make sure that you would not cover and supplement lesser benefits caused by failure to use the PPO or, in the case of mandatory second opinions, not getting such second opinions. Otherwise that 12 percent coinsurance saving of Metropolitan would be paid by someone else, and when it's the other side, you, in turn, will be paying the extra coinsurance.

MR. GALASSO: I don't have any answer as to how we at Blue Cross of Florida are addressing the coordination of benefits issue. I think it is a valid issue, but I don't know if anyone has really worked out the answers to that.

MR. JOSHUA JACOBS: Would there be a big advantage with increased savings if you could get the hospital preferred providers to accept prospective pricing with a DRG system so that those that went there would be subject to that system instead of traditional charges?

MR. GALASSO: At Blue Cross of Florida, that is what our PPO does. It pays under a DRG reimbursement basis, and there are a lot of plans

* Ms. Ogden, not a member of the Society, is a Consulting Actuary at Wilcox & Cannon.

in the country that use that. It gets back to one of the earlier points as to the lack of similarity from one PPO to another. One of the first decisions you have to make is on what basis you are going to reimburse the providers.

MR. HANDLEY: It is an interesting point to bring out. In Kansas City, we are in the process now of negotiating with the hospitals, and we are in the process of implementing a DRG system. The nonpreferred providers under one of our PPO groups will be reimbursed under the DRG system. At least initially, our preferred hospitals will not be. Although it is our intent next year to fold into the DRG system, we will probably have a different set of rates for the preferred providers as opposed to nonpreferred. We haven't worked out those details yet.

MR. GALASSO: I don't think it should be taken as a given by anyone that DRG is the answer to it all. We are struggling with that ourselves. Our HMOs generally go per diem, a set dollar amount per day in the hospital. Their feeling is they have strong utilization controls on the part of the physician, and they can save more and get a better deal from the hospitals on a per diem basis than a DRG. DRG does, as you suggest, get the people out of the hospital very quickly, but one of the issues is that with any system you construct, the hospitals are going to start gearing themselves for maximum reimbursement. There is a school of thought that says, whatever way the government goes, perhaps you should go the opposite because the providers will have put themselves in maximum reimbursement posture relative to the government.

MR. KEENAN: At Metropolitan, the arrangements that we have with the hospitals vary from provider to provider. We have some where it's DRG reimbursement and some where it's based on a fee. Our philosophy is to get the best deal we can from each hospital. We negotiate price, so we are willing to go any way that we can get a good deal.