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## Session 118PD
## Strategic Response to Medical Inflationary Factors


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*Summary: The panel addresses possible strategies to identify and control factors causing medical inflation. For example, these factors include technology advancements and shifting indemnity coverages to and from managed care designs.*


**Mr. Scott E. Guillemette:** We have a panel of experts to discuss inflationary factors and strategic responses. Kevin Dolsky has held various senior executive level positions in managed care organizations (MCOs), including managing actuarial provider contracting in health services research. Kevin has served as chief actuary for two Blue Cross plans and a New York Stock Exchange traded managed care company. In 1997, Kevin founded the consulting firm of Actuarial and Healthcare Solutions, which provides services to MCO providers and health plan sponsors. Jan Carstens is a principal at Towers Perrin in Minneapolis and the office manager of the integrated health systems consulting practice. Jan has more than 15 years of health care experience, serves on the Health Committee of the Actuarial Standards Board and has served on several other committees of the SOA and the AAA. Both Jan and Kevin are FSAs. I am also with Towers Perrin in Minneapolis and have more than 11 years of health care experience.

**Mr. Kevin M. Dolsky:** I will focus on a methodology used to identify medical inflation, and then I will discuss some measures that can be implemented to control medical inflation. From my perspective, any discussion on controlling medical inflation really turns into a discussion about controlling medical costs. Medical inflation is not a new topic because we address it on an ongoing basis.

Even though inflation has lately been lower, the topic remains pertinent. In fact, during the last week, two publicly traded managed care companies, United Health Care and PacificCare, indicated in news releases that they have substantial resources devoted to tracking medical inflation.

In my discussion I will comment on several items: medical inflation, a measurement system for medical inflation and some actions that might be taken due to the results of the measurement, controlling medical inflation and the cost of medical services, and some general comments about the delivery of medical services and some other controls. I would like to point out that this session is put together for someone with no experience in the subject. For those of you with experience, I hope we delve into these topics at sufficient detail. However, because the topic of controlling medical costs is very broad, sufficiently detailed discussions could take a day or even a week.

For the purpose of my discussion, medical inflation is defined as the change in per-member per-month (PMPM) cost for a specified population. A question that arises, which I will keep coming back to, is "whose cost are we talking about?" There is a difference in how you view medical inflation, depending on whether you are an employer whose cost is related to the cost of offering a medical program or an insurer whose cost is related to the reimbursement to providers, which, in turn, represents revenue to the providers. As you go down the line, one entity's cost is the next one's revenue. Thus, if we discussed controlling costs from a provider's perspective, we are not talking about the reimbursement rates from the insurer or MCO. Please keep this in mind while I am discussing measuring and controlling medical inflation.

I have identified five categories of service that are representative of a fairly typical organization: hospital inpatient, hospital outpatient, physician, prescription drugs, and other. Each service category has an approximate PMPM cost associated with the category. We then monitor the change in the PMPM cost over time. The next step would be to take the percentage of change observed within each category and break it down between number of services and cost per service. What we find here will affect the methods we choose to control inflation. For example, in the case of physician services, a PMPM change of 5% may be the result of a 3% change in the price of services or cost per service and a 2% change in the number of services provided per person in the population observed.

The next step would be to identify key service categories within the five general service categories and develop an approximate PMPM cost for each of these categories. For example, within physician services, we can identify office visits, inpatient visits, psychiatric visits, surgical services, and so forth. For illustrative

purposes, I have broken the costs into 24 categories. Obviously, we could break the costs down into more categories; however, we will then have categories of $0.20 PMPM or less. Although these categories may present opportunities for management, they are probably not the primary drivers of cost. At any rate, you would not want to simply look at PMPM cost within these categories as the only measure and indicator of trend; you would also want to look at the cost per service and the utilization per service to identify the important categories for cost control.

I have several comments about the collection of data for analyzing inflation in medical costs. A number of comments have been made in some of the sessions about databases that are currently available. Frequently, publicly available databases are at least a year old. For calendar-year 1997, data from 1995 may be the most current data available. Typically, an organization will want to work with its own data in addition to that which are publicly available. The analyzers will want to use data that are as current as possible, but they typically cannot use the most current claims experience because these months are not complete and they are subject to claims processing fluctuations that affect how complete the ultimate claims are. Furthermore, when reviewing and adjusting cost and utilization, completion factors would typically be applied to the utilization component and not the cost component. Therefore, I would suggest working with claims by incurred month with three months of paid run out.

Another important thing to remember when collecting data is that the claims in your claim runs will probably not match the claim totals in the financial reports. Completion factors used to estimate claims in the financial statements are generally conservative. Using the factors from the financial to estimate medical inflation may result in a misestimation of trend. For example, if in reality the trend is flat, you would read the trend from the statements as if it is starting to rise. Six months later, when the experience is relatively complete and the anticipated rise did not occur, you would still conclude it is beginning to rise from the most recent financial. On the other hand, if there is really an underlying decline, the decline would not show up when using the financial statement completion factors due to the conservatism built into the factors.

With respect to which claims are the most appropriate to review, there are usually a number of dollar fields to select from: billed amounts, allowed amounts, or paid amounts. Typically, you want to use allowed amounts after discounts to be the measure of inflation. Another factor in the data configuration is the encounter experience. Frequently, not all encounters are reported if payment is based on a capitation. You also may need to adjust the data for catastrophic claims, which may distort an analysis of medical inflation.

Other items that can affect the data are changes to the observed population or underwriting changes. In particular, changes in the population mix due to changes in age, gender, percentage of single versus family contracts, distribution by area, distribution by benefit plan, and the ratio of underwritten business to nonunderwritten business are all factors that can cause changes in cost that are not due to medical inflation. For example, when reviewing actual data from a company with approximately one-half billion in claim dollars, we observed that the percentage change from the same quarter in the prior year went from 0% in the third quarter of 1993, to negative 1% in the first and second quarters of 1994, to 2% in the third quarter of 1994, and to 14% by the second quarter of 1995. We then tore apart the increase to determine how much of the change was due to medical inflation and how much was due to things such as the wear off of duration, changes to benefit plan design, etc. We determined that medical inflation went from approximately 4% to 9% in about three quarters, and the remaining change was the result of other factors. This example also illustrates why it is important to look at time series data versus just a snapshot of data from one period to the next.

I would like to make a couple comments about CPI data. CPI data are quite accessible and may work their way into reimbursement contracts. They are a measure of price only, and do not reflect the other components driving inflation. Regional variations in the CPI can sometimes be pertinent. I was working in the Milwaukee metropolitan statistical area recently, and the inflation rate measured by the CPI was around 10%, whereas other Midwestern cities were at about one-third to one-half that amount. Recent data would indicate that the CPI for the last 12 months is approximately 3%. The best example of a service category where the CPI does not accurately reflect medical inflation is prescription drugs; information from an MCO indicates that its PMPM costs for prescription drugs increased by 30% over a four-year period compared with the CPI for prescription drugs, which increased by about 12% over the same period. Another example would be for hospital services. CPI data would indicate an increase of approximately 45% over a six-year time period whereas data from an MCO indicated an increase in inpatient cost per day over this same period of approximately 120%.

Before I discuss the topic of controlling medical inflation, I would like to once again emphasize that the employer's perspective will likely be different from the insurer's or provider's perspective. Some of my comments will be tailored to each perspective. The strategies to control medical inflation follow directly from data analysis. Through the data analysis you can determine whether the cause for inflation is through the utilization or from the cost component of the service. If the cause is from utilization, some form of utilization control would be the strategy that you would employ. Utilization control might include things such as medical management, or informing particular networks or providers that their utilization

patterns are different from other providers. It has been shown to be substantially effective to develop utilization performance information to share with providers so that the providers have an incentive to take actions to control their utilization patterns.

In the area of cost control, an MCO may try to control cost per service through reimbursement contracts. What the insurer pays fosters service and if the MCO is a provider, cost control would occur in the area of delivery. Another method of cost control is through providing information on the outcomes of cases. More specifically, I am referring to outcome measurements. One outcomes measure is reviewing the clinical results (that is, the medical procedure). For example, did the medical or surgical procedure turn out as expected? Was it practiced according to certain standards? Were protocols performed in their expected sequence? Another outcome measure is functional status (i.e., how well is the population or individual)? For example, can he or she go to work? Walk? Perform activities of daily living? Satisfaction is a perceived measure of outcome on the part of the patient, that is, a perception of how good the medical services were. Health plans and providers are measuring satisfaction based on how someone believes things turned out. Well-being is another perception measure that is different from satisfaction. It is an outcome measure on the part of the population's end cost, which we tend to focus on.

For an MCO, strategies in provider contracting, such as the use of capitation, ultimately shift risk to the providers. This may provide an incentive for the provider to manage the cost of delivering services. Another form of cost control is to use multiyear rates for provider services, such as negotiating two-year or three-year provider contracts. Multiyear contracts should be approached with caution, however, because some managed care plans got into trouble in recent years when they went to multiyear rates for certain categories of service and the actual costs for these services decreased over the guarantee period. There may also be limits on updates to multiyear contracts such as an increase that is limited to no more than, say, 3%, or no more than the medical component of the CPI.

With the delivery of medical services, there is the use of best practices. By this I mean sharing of information on how medical services are practiced, whether that is by reference to the PAS study or the Milliman and Robertson health management guidelines, for example. Best practices have been implemented successfully by a number of managed care companies by sharing practice pattern information of other providers in the local area. Best practices identify practice patterns for a specific type of service that is performed most cost effectively. These patterns are then shared with others so that they might eventually become part of the physician's standard of care.

Another area of cost control in the delivery of medical services is the redesign of care delivery or re-engineering. How are charts flowing through hospitals? How is care delivered? Efforts going on in these areas are primarily being done by the providers to change the way services are administered and delivered. Evaluation of the delivery system and its design is information-driven as are many of the quality measures.

Several individuals in earlier sessions have commented on how managed care is so dependent on the information systems. I know a physician associate who defines managed care as "an observed and examined way of delivering medical care." Rather than just providing care, it is also examined. Information systems provide physicians and management feedback on the delivery system. I think we have a lot of opportunity to do things in the area of information systems. Mergers of health systems have forced the combination or consolidation of resources and facilities. This is economically driven by their ability to reduce cost through combined purchasing, reduced management staffs, and eliminating duplicate facilities, duplicate services, and duplicate technologies. These processes have been designed primarily by providers to lower medical cost and to increase quality and efficiency.

Case management is another cost control strategy. It refers to providing care in the most appropriate and cost-effective manner. I view case management as being somewhat synonymous with health improvement and chronic illness management. A definition of quality in this area has to do with the reduction in the amount of unplanned care. For example, for a person with asthma, a quality measure would be that the person is identified and that treatments are provided and available in advance so the person does not end up with an acute situation in the emergency room. This concept can be extended to other kinds of chronic illnesses. Diabetes is certainly a popular one, but the idea here is to identify the population and then put in the programs to improve their health status. Another issue here is functionality, which has been referred to as the ultimate customer service in the delivery of medical care. We have customer service measures, such as how long did the patient wait in the office? These are all important, but the functionality of the population is a measure of how well the system worked at health improvement.

Other strategies to control medical inflation are practiced by the community at large. The community is able to affect health issues by mandating the use of seat belts and ensuring there is clean air and water, which ultimately have an effect on controlling medical inflation. The individuals using the health system also play a role in controlling medical inflation through health improvement and taking responsibility for their own behavior.

Last, control of administrative costs controls medical inflation. This includes eliminating unnecessary record keeping, duplicate tests, inefficient information transfer, etc.

I would like to close by noting that the current health care system simply transfers inflation from one key stakeholder to the next: from the insurer to the provider to the individual to the employer to the government and back again. There is a certain frustration about a system that just keeps moving things around. With a more interactive system with the same players and a functional, sustaining system where there are rules in each area for cost control, inflation may possibly be reduced throughout the system.

**Mr. Guillemette:** Jan and I, through a joint presentation, are going to take a little different perspective. Kevin's presentation was more focused on measuring strategic responses to inflation. We will address these issues as well; however, we're first going to discuss some background on trend. We're going to take the major pieces of trend and try to unbundle them. For example, under medical expenses, there are two types of trends—reimbursement and utilization trend. Both are major components. We're going to break each down and give strategic responses to each of them. We are also going to talk about the nonmedical expense component or administrative piece and how it seems to be staying level while all the other pieces of the pie are shrinking. We're also going to talk about other less quantifiable trends and overall strategic responses to them. Finally, we'll get into the responsibilities of the actuary.

I reviewed many sources to see how they actually defined the word trend. I found that every definition included the word change. So change is ultimately what trend embodies. Trend can be looked at as an index, such as the CPI. The CPI by itself will not be a very accurate depiction of trend if your plan has reimbursement arrangements that change based on negotiation. With respect to projecting the future, you look at trends to see what the past was in order to project the future. The issue with projecting the future from past trends is that it is not always appropriate. We'll see some examples of why that is the case. A lot of times people use trend information to detect problems. For example, when reviewing specialist costs, breaking down experience by specialty, you might actually observe some peculiarities: the cardiology specialty might be increasing quicker than, say, OB/GYN. That should send a signal that you should take a deeper look into that specialty.

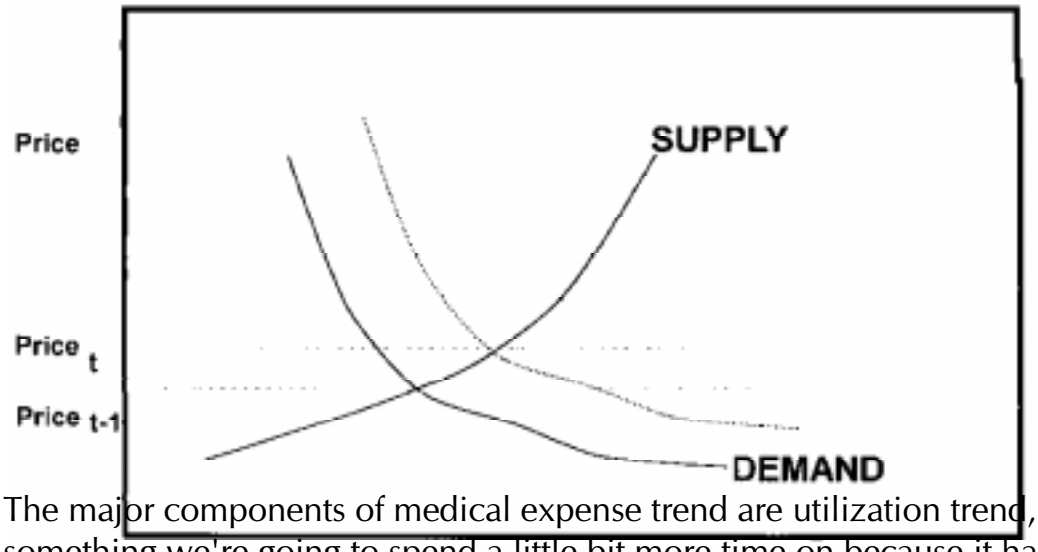
We compare and contrast trends when we look at competitors' filings to see how much they increased or decreased their rates. Trends may be used to measure performance against a predefined target or goal. For example, a target that plan

management may have passed down to the provider relations department or the contracting department required an increase in the aggregate provider reimbursement rates of 4% for the year. When all is said and done, we will want to measure how experience actually turned out compared with the target.

Finally, we measure trend to examine the pricing implications of rate changes by building an actuarial cost model and adjusting variables to determine the impact on the rates.

Now in the general case, everyone has probably seen this standard supply and demand curve (Chart 1). For those of you who attended Jim Hickman's general session, Jim indicated that we are currently at 0% population growth. This would imply that the supply curve, if we think about it generally, is somewhat fixed in the context that we don't have much more labor to actually produce. Members out there are getting a lot more educated with respect to their benefits and how they use their health care. This is what I call consumerism. Health care demand has been picking up a little bit, which is causing shifts in the demand curve to the dotted line, and with that, there is a subsequent increase in price. The trend is the change in price. As I said earlier, we will be breaking down the trend and trying to unbundle its individual components.

CHART 1
HOW DOES TREND OCCUR?




The major components of medical expense trend are utilization trend, which is something we're going to spend a little bit more time on because it has a lot of components to analyze, reimbursement trend, nonmedical expense trend, and then other less defined components of trend.

Although we're going to spend quite a bit of time on the utilization component of the total, I believe the reimbursement trend probably has a more significant impact

on the overall pricing trend. As part of any trend analysis, I think it is very important to have an understanding of the source of the numbers. Where are they coming from? How are we measuring them? One of the things that might be of concern is incurred but not reported (IBNR) claims. As Kevin had mentioned, be sure you understand the basis of your numbers and whether they're paid or accrued.

One caveat with respect to reimbursement trend is that it is generally easier to track than the other components of trend. I think that's probably more the case in managed care. If we're talking about indemnity products, this applies to a lesser degree because reimbursement trend is more of a byproduct of the average percentage discount from charge, which is more difficult to assess.

The first component in the utilization trend is the service mix change. I've just given a simple example using office visits by current procedural terminology (CPT) codes. In this simple example (Table 1), we're taking the counts and dividing it by the category total to determine a distribution. Applying it to a fixed-fee schedule, we'll see that the average cost increases some from Year t-1 to Year t. This is something that has been coined as code creed in the past. It's something plan management should review periodically.

Other sources of service mix changes can occur; for example, the shift in services from in to out-of-network in a point-of-service (POS) product or shifts in the diagnostic related group (DRG) distribution of admits.

**Ms. Janet M. Carstens:** One strategic response to service mix changes is provider profiling or auditing, where you'd compare a provider's mix of services against benchmarks. Another is a report card process, where you would calculate an average relative value unit (RVU) that could then be age/sex-adjusted. The particular provider's RVU is then compared with the average, and if it is more than, say, two standard deviations away from the average, then that provider would have to be reported or talked to about mending its practice patterns. Some health plans post the results on a bulletin board for public scrutiny. In my opinion, it's a way of tattling on the ones using higher-cost services. To lessen the effect of service mix changes, you could capitate the provider. As Kevin said, this is not necessarily controlling trend, but shifting the cost (and risk) to another entity. If you're capitating, you have to make sure the services are high volume such that there is little fluctuation in utilization. This will ultimately protect the provider. To implement the first of these three responses, you need to have flexible management information systems (MIS)—a flexible reporting system. Then of course, you'd want to make sure that if you are doing a provider-by-provider comparison or if you are comparing benchmarks, you should ensure that the results are age/sex adjusted.

TABLE 1
UTILIZATION TREND—SERVICE MIX CHANGES

| Cpt Code | Year t –1 Procedure Distribution | Year t Procedure Distribution | Fee Schedule Amount |
|---|---|---|---|
| 99201 | 0.8% | 0.6% | $50 |
| 99202 | 3.4 | 3.3 | 55 |
| 99203 | 5.7 | 5.6 | 60 |
| 99204 | 3.4 | 3.5 | 70 |
| 99205 | 1.8 | 2.1 | 85 |
| 99211 | 4.1 | 3.8 | 40 |
| 99212 | 14.1 | 14.7 | 45 |
| 99213 | 43.0 | 42.0 | 50 |
| 99214 | 18.2 | 19.1 | 60 |
| 99215 | 4.5 | 5.3 | 75 |
| | 100.0% | 100.0% | |

| | | |
|---|---|---|
| Year t –1 average | $53.83 | |
| Year t average | $54.28 | |
| Percentage Change | | +0.8% |

**Mr. Guillemette:** Moving on to technology changes that cause changes in utilization, with respect to the HIV/AIDS population, I learned during a client project that with the introduction of protease inhibitor therapy, there is a significant change in the way utilization occurs for this population.

In the past, generally during the very early stages of HIV, utilization was very low in terms of drug therapy. It was high compared with an average commercial population; however, it's still relatively low. With the introduction of protease inhibitors, there is an intensive treatment process at the very beginning stages of HIV, and this continues on. Now obviously, it raises the quality of life for the person, nearly eliminating the HIV and bringing cell levels and viral load levels way down. But there is definitely a cost impact. In our research, we're not yet seeing the true pronounced effect of this new therapy. However, we have found that the year-end costs of the HIV patients are still as high as they were before the inhibitors; the inhibitors are just bringing the front-end cost of care to 3–4 times higher than in the past. This is one form of technology.

Another form we've all seen in the past is MRI and balloon angioplasties. One technological issue I think we'll see a lot more of in the future is genome studies.

**Ms. Carstens:** One response to technology increases is to not cover the benefit that pertains to that technology. Sometimes you can exclude coverage for certain services that may be related to technology changes for a certain period of time. Sometimes it's politically impossible to exclude coverage for certain things. Alternatively, you can risk-adjust the capitations, such as in the HIV example we reviewed earlier. For HIV positive, you can have capitation amounts vary by T-cell. Alternatively, you can use reinsurance or you can negotiate heavy discounts from billed charges up front if it's related to anything associated with technology changes.

Last, your provider agreements, incentives, and provider withholds can be structured such that you're passing any trend associated with technology on to the provider. We note that it is sometimes difficult to isolate trends associated with changes in technology.

**Mr. Guillemette:** That could be primarily because of the other shifting patterns of care that might be happening in the marketplace, such as changes in demographics. One of the items we see is the aging of the population. Again, with a 0% growth rate, the proportion of the aged population compared with the total population will grow. That will most certainly have an impact on utilization for certain services. One example is cardiology where I think we can expect to see some significant utilization increases unless there is some heavy medical management in that capacity or capitation.

Another factor is the young and healthy moving into the HMOs because of benefit design and the way that they are structured in the triple option. Alternatively, if an extremely high-deductible plan is being offered, you're probably going to find young, healthy folks enrolling in that option simply because it is cheaper. The employer contribution rates and how flexible credits are established by your employer will also have a considerable impact on utilization just in terms of who enrolled in what. Access to a broad provider network will also affect utilization. With a low pediatrician representation and a low OB/GYN representation, this limited access will definitely affect utilization for a Medicaid product. As Kevin mentioned, changes in subscriber characteristics will result from changes in how you structure your rate loads or the average family size in your rating.

**Ms. Carstens:** As Kevin alluded to, we need to be cognizant as to whose perspective we are trying to measure trend from—the payor's perspective, the employer's perspective, or the provider's perspective. One of the strategic

approaches that can be used to account for changes in demographics is an age/sex-adjusted capitation. This means paying your providers an age/sex adjusted amount that reflects the changes in demographics. Another approach would be to adjust pricing to incorporate age, sex, industry, and so on, factors into your rating methodology.

The first approach outlined above is a reactive response. It doesn't necessarily impact the demographic mix that enrolls for any particular product, but it does address the cost issue. The second approach can be considered a proactive approach because it does affect the actual demographic mix that is attracted to the product. You can adjust rate loads and conversion factors in your pricing to accomplish whatever your objectives are.

**Mr. Guillemette:** Another factor that can influence utilization is product mix changes. For example, with the introduction of a POS product, you can certainly have increased utilization because now members obviously have a choice to go out of network where they may not have had that with just the strict HMO option. Pent-up demand often affects the utilization of dental and vision products. Removing products from your portfolio will have a different effect. If you start to close blocks of, say individual business, there will be some antiselection or possibly a selection spiral that could increase utilization. Last, if medical underwriting is used, as the block of business matures, the underwriting begins to wear off and utilization increases.

**Ms. Carstens:** The strategic responses that would account for changes in the product mix are to structure benefit design to minimize the selection. You could have annual limits on coverage of certain benefits. You could limit the movement between and within plans. For example, if somebody chooses not to enroll in the dental plan or vision plan for one year, you can then restrict re-enrollment for a period of two or three years. You can use rate loads in the first couple years to account for some of the pent-up demand issues. You probably don't want to have too high of a rate load in the first year, but grade in a rate load over a period of a few years. For the removal of products or benefit designs, you could try to limit the deterioration that will happen within that closed block by limiting rate increases or rolling all your in-force business into a new product. For the effects of medical underwriting, you could use durational rating or some of the standard underwriting criteria, which include participation minimums, 100% contribution requirements, actively-at-work requirements or a total replacement requirement if there is a highly competitive environment and multiple types of health plans are being offered.

**Mr. Guillemette:** Another factor influencing utilization is changes to laws and regulations. A simple example is the mandatory maternity-stay requirements that

are popping up all over the country. Although this may be a fairly trivial change in the regulation, it does have a significant impact on the utilization for that particular service category. I believe normal deliveries are generally one of the most predominantly used procedure codes in most health plans.

An additional example of changes in laws and regulations are the "any willing provider" laws that fall under the class of "anti-managed-care laws." Surveys say that any willing provider legislation could result in a 15–20% increase in the premium. A subcomponent of this legislation is coverage of alternative care services. That includes acupuncturists, herbalists, etc. I believe Oxford Health Plans have implemented coverage of alternative providers and they estimated that the impact is about 3% of premiums.

Small-group legislation, such as the Health Insurance Portability and Accountability Act (HIPAA), could increase costs from 5% to 30%, depending on the extent of underwriting that a health plan currently uses.

Expanded medical definitions could also increase utilization. Most HMOs currently provide coverage to bring people who are on therapeutic care or in physical occupational therapy back to their prior condition from, say, an accident or injury. They exclude coverage for people who are born with certain conditions. The expanded medical definition would cover individuals born with certain conditions as well. That could have a significant impact on utilization.

**Ms. Carstens:** A strategic response to changes in laws and regulations would be a change in benefit plan design. For instance, Scott's example talked about the requirements on length of stay for maternity coverage; you could change your benefit design from an inpatient admission copayment to a per-day copayment. You could also modify the rating structure. There is nothing within HIPAA that prohibits you from being able to apply a tier rating structure for small groups. Last, you could offer a self-insured product if you don't already.

**Mr. Guillemette:** We're not trying to stress that you should be doing tier rating here. It just happens to be one possible strategic response.

Cost shifting is also a cause of utilization trend. Most people have seen this with respect to, for example, shifting care from the inpatient setting to the outpatient setting. As care shifts to the outpatient setting, hospitals may increase their outpatient service costs and, therefore, their requirements for reimbursement. Another example would be how providers compensate for decreasing reimbursement for Medicare and Medicaid services.

**Ms. Carstens:** In defining strategic approaches to address cost shifting, it is important to determine the most desirable plan of action. In Scott's first example, it may be desirable to shift inpatient cost to an outpatient setting. You can then deal with increases to the average cost of outpatient services at a separate point in time in the future. Other strategic responses to address cost shifting include paying providers a risk-adjusted capitation, using a provider profiling, or using report cards. The appropriate response depends on where the cost shifting is coming from, whether it's internal, and whether it originates from the payor side or the provider side.

**Mr. Guillemette:** Once again, I'll reference the sentinel effect that we had mentioned earlier with respect to report cards: if your peers receive a report, and you see that same report and you're on one end while your peers are on the other, you're going to feel a little awkward about why you are an outlier.

The last component we have identified that may cause changes in utilization includes other sources. Because of the tax structure in any given state, the employer, if it has a fairly healthy population, may decide to self-insure. This could leave a less desirable population in the insured market. Provider stop-loss arrangements without coinsurance after reaching the threshold may provide an incentive to the physician to chase the threshold just to exceed it.

Provider withhold and incentive arrangements may be viewed by the providers as a penalty and could affect utilization. As I mentioned before, the consumer is becoming better educated and is getting better at understanding health care, which could increase consumer demand. Other sources include random statistical fluctuation (which we have tools to minimize) and misestimation error (which we are all capable of). The last items are epidemics and acts of God.

**Ms. Carstens:** Now we would like to talk just a little bit about the reimbursement trend or average cost trend, which is directly impacted by what you negotiate in your contractual arrangements. I think we said this before, but it reflects the change in reimbursement that the provider receives over time for the same service. The measurement depends on the reimbursement methodology and the type of service. The last four types of reimbursement methodologies (per procedure, per day, per stay/case, per member) would keep that alignment.

One item that affects reimbursement trends is market expectations and market share of the negotiating entity. If you have the larger market share, you probably have more clout in being able to negotiate reimbursement rates with providers. To some extent, this will depend on the prevalence of managed care products and networks in any particular area. The more aggressive an MCO is in negotiating lower levels

of reimbursement, the lower the premium trends will be, which may make it easier or more difficult for another entity to negotiate the same discount.

Another item is the level of competition. In general, the greater the level of competition, the lower the premium trend.

Another item is the utilization trend. If there is high utilization, it's possible that you won't be able to reflect a high-cost trend in your premium rates, so therefore, you'll have to negotiate a lower-cost trend.

Another item is surplus position. The more surplus you have, the lower the trend rate that you may be able to use. How material the line of business is on the bottom line is also important. If the product represents an insignificant portion of your business, then it may not be worthwhile to spend a lot of time trying to negotiate a different kind of reimbursement trend.

Business objectives and revenue requirements are driven somewhat by market expectations. You may want to increase market share, so you may use a lower trend rate. Alternatively, you may want to get out of the line of business, so you may use a higher trend rate. The last item is deductible leveraging. The higher the deductible, the greater the trend will be.

Overall, what we do as a strategic response to reimbursement or cost trend is just negotiate the best deal possible.

**Mr. Guillemette:** I would like to briefly discuss nonmedical expense trends. I believe there are some fairly clear reasons why we should focus on nonmedical expense trends, especially in light of all the requirements that are coming about for the Health Employer Data Information Set, the National Committee for Quality Assurance, etc., accreditation. Some definite expenses will be associated with meeting those guidelines, which will affect the trend.

Since the reinsurance market has been playing catch-up, it has been underpriced. In addition, because of deductible leveraging, the larger the proportion of claims being exposed to reinsurance, the greater your trends will be. Other reasons for nonmedical expense trends include tax and regulatory requirements, profit/ contingency margins, population mix, increased underwriting efforts, MIS upgrades and training, and commission requirements.

**Ms. Carstens:** Strategic responses to nonmedical expense trends include performing expense analyses, subcontracting to outside vendors for certain service categories, transferring expense components to the provider community (i.e., medical

management component) through the reimbursement mechanism, or offering administrative services only (ASO) business to produce economies of scale.

**Mr. Guillemette:** Now I will discuss some of the less defined causes of trend. To some extent, premium increases are a function of how profitable the plan was in the recent past. I think that's a function of the surplus. Obviously, if you have more surplus, you're a little bit more comfortable in granting lower rate increases.

We are now heading down the underwriting cycle, so we are starting to see the trends increase. As Jan said earlier, price competition reduces trend, and margins eventually are squeezed down once you have medically managed everything down as low as possible.

Mergers will potentially increase premiums. Because the combined entities are larger, they have greater perceived leverage, and they can use that in their negotiations.

Other less-defined causes of trend include the extent that your portfolio includes international medical business, which reflects regional trends, and the overall level of managed care penetration.

**Ms. Carstens:** Within each section of our presentation (utilization trends, cost trends, nonmedical expense trends, etc.), we tried to give what we see as the strategic responses to address these specific components. Some of the overall strategic responses that affect all the components are to build an actuarial cost model and simulate results, compare observed trends to industry benchmarks, be conservative with multiyear rate guarantees, analyze trends on a timely basis, and anticipate cycles.

One thing I'll point out is that you should analyze trends on a timely basis. It takes quite a while to recognize trends, and by the time you can actually do something about it, a lot of time has passed.

**Mr. Guillemette:** Our final comments have to do with the responsibility of the actuary. Almost all our Standards of Practice in some way, shape, or form require the actuary to consider trends. If trends are deviating from normal for one reason or another, you have to disclose the materiality of the deviation in your analysis.