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MEETING THE NEEDS AND DESIRES OF LARGE EMPLOYERS

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MR. LEE H. RESNICK: I'm with Ernst & Young and I'm very privileged to have two distinguished speakers. The first is Dr. Ed Lipson. Ed runs Ernst & Young's National Managed Care Practice. The second speaker is Bob Nelsen, formerly of Employers Health Insurance Company, who's now an independent consultant.

We will start out with a videotape. Ernst & Young did some interviews with four legislative leaders: Senator George Mitchell, Senate Majority Leader; Senator Jay Rockefeller, Senate Finance Committee; Representative Richard Gephart, House Majority Leader; and Representative Pete Stark of the Ways and Means committee. They give their views on the videotape on what is going to happen in the near future with respect to health care reform.

We're not going to go through a lot of details on what managed competition is, but after the video we're going to give you some late-breaking information out of Washington. Then I'll turn the program over to the speakers. (Videotape shown.)

I'd like to tell you what's late-breaking. We're not going to rehash managed competition and what it is. We do want to provide you with some late-breaking information that you might be interested in, and then we'll talk about two key things that large employers can be doing. This information is recent. I should point out that we can never be sure that this information is 100% accurate. We expect that the president will be announcing that health care is a national crisis and it's going to be something like a "Call To Arms," if you will. That announcement will be coming shortly. We expect that he will reconvene a special session of Congress shortly after Memorial Day to vote and put into place some new legislation. By July 1, we expect that they're going to freeze prices on everything -- it's not clear what everything is, but doctors, hospitals, insurance company premiums will all be frozen retroactive to January 1, 1993. By October 1, 1993, we anticipate that national diagnostic related groups (DRGs) will apply to everyone, including the private payers. In fact, the Health Care Financing Administration is already working on that. Global budgeting appears to be forthcoming. So, while that freight train is coming, I think it's fair to say that those freezes will probably be short term until they can enact a full program by January 1, 1994. We're not sure if this information is 100% accurate.

I'd like to now introduce Dr. Ed Lipson from Ernst & Young. Ed is a board certified pediatrician who is the national director of Ernst & Young's Managed Care Practice.

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Ed is going to talk to us about one of the key components of managed competition, which is measuring quality and outcome. Now, that's going to be something that's very important whether you're a large employer trying to deal with managed competition, or whether you're a provider. But since it's one of the key components of managed competition, we thought you should hear about it from a large employer perspective.

DR. EDWARD H. LIPSON: I will be discussing some concepts on employer evaluation of managed-care networks. It's a very important topic as we move forward with some of the managed care and managed competition concepts that we saw on the videotape. Everyone has their definition of managed care. My definition is that it's a set of strategies to manage quality, service, volume, and price. We can talk about the nuances of it, but if it doesn't manage quality, service, volume, and price then it isn't managed care. Now, there are many different vehicles to deliver these three elements. Managed indemnity programs are the simplest form. The major difference among the various vehicles that are going to provide quality, service, volume, and price is their effectiveness and vigor. We have a lot of complexity, but I think if you boil it down to basic components that's what managed care is.

In terms of the perspective, I think we can talk about some type of provider network systems to deliver quality, and that is certainly a perspective that I found working with larger employers. You've been hearing me talk a lot about quality because large employers traditionally have focused on cost and more and more of them are now focusing on quality as well.

Finally, I will be representing the employer or purchaser point of view. Obviously, the providers might have a different perspective.

In the past, the employers didn't bother to evaluate quality. Managing quality was considered the provider's or the insurance company's responsibility. First, many of our employer-clients are implementing various kinds of total quality management programs. They expect their vendors to get into similar programs to show the same type of total quality management programs in their operations. The providers of health care to employers are no different than other vendors.

Second, there's some concern about undercare. As a result of incentives to manage costs, there's not enough care provided to the population. Thus, many of our employers are coming up with notions that we have to carefully evaluate quality as part of the managed-care arrangements. Is it possible that evaluating quality will increase employer liability? The employers don't practice medicine. What can they do to manage that exposure? They can use due care in selecting their managed-care arrangements. We see more employers interested in managed-care evaluation to manage their liability exposure.

Finally, there is this conviction that good quality costs less. Doing it right the first time costs less in both industry and in health care. I'll cite some examples later.

We go around this term quality quite a bit. I think in 1989 the Joint Commission on Quality Assurance came out with a description of some of the characteristics of quality. First, the care should be efficacious. It should be useful. Whatever we do in

medicine, it should work. Second, it should be appropriate. It should be the best course of action for a particular patient. Accessibility. If it's right, can the patient get it. If the patient can get it, is it acceptable to them? I think that the patient must desire and agree to health care as opposed to doing what physicians or hospitals want them to do. Is it efficient? Is it cost effective? Finally, does the care proceed continuously without interruption?

So, if we have these characteristics, we would be in great shape. Improving these quality characteristics is an endless circle. We must support employers to try to evaluate whether their particular health care benefit options contain these seven characteristics of quality as well as service volume control and some regulation on prices.

Let me provide you with a few examples from the member point of view. The structural variable for quality would be whether or not the services available in the managed care network are accessible and appropriate to the needs. In terms of the process, is the HMO or managed care organization customer oriented and user friendly? Finally, the outcome measure is to achieve a remedy. This is what people really want when they seek out health care. They want to get better if they're sick. They want their functional status improved.

In various managed-care networks used by large employers, there are some things that really contribute to the structural view of quality from the employee point of view. One thing is whether or not the providers are matched with either an employee's residence or workplace and that's where you probably have to use both historical claims data and access demographic data.

Provider location zip code. We find a lot of times that there might be a managed-care network with adequate access on paper but key provider practices are closed. We can evaluate how the network indicates in the provider directory when a doctor's practice is closed. So, I ask you, is that not to be followed as a measure of network quality? In terms of turnover, we know some providers retire, but if there's too much turnover, we are asking employees to sever relationships with their historical providers and switch to a new panel that hopefully is more efficient. If your new provider leaves the network after a couple of months, you have a real employee relations problem. So, these are some of the things that we specifically need to measure when we're working with our employers to evaluate managed-care quality.

In terms of remedy and the outcome variable that I mentioned, there is a national outcome study that's being sponsored by managed-care organizations, and a whole host of researchers have come up with this short form, SF-36 Form. This form asks employees whether they feel their health status has improved and about limitations in their daily activities. What's the employee's perception of their energy level and other variables? The results from the outcomes study were released in November 1992.

From an employer point of view, what is the value of going through the three quality variables: structure, process and outcome? Certainly, the employers are in a network location. They're very interested in an administrative system, consistency and error-free claims handling. Of course, they're interested in what their employees feel

because they'll hear about it if the quality is suboptimal. This framework is a useful way of conceptualizing how employees can value quality.

There are interesting relationships that one can find between clinical and service quality and utilization. As we start to manage utilization, what are some of the trade-offs? Well, certainly, if you increase the quality of care, you can decrease the volume of services required because doing it right the first time costs less. This is as true in health care as it is in any other industry. If we have a patient who goes into the hospital and gets a hospital acquired infection, then the quality was not good; also it means that we have to spend more in terms of days of care, drugs, lab tests, etc.

Second, if we do too much to patients, we can harm them. So, if we increase the volume of services, we can actually decrease quality. This is what we call the therapeutic misadventure. We have a disease called iatrogenesis, which means physician caused disease. If you go to a hospital and stay there long enough, something bad will happen. We know that to some extent you actually improve quality by keeping people out of the hospital.

Third, you can decrease the volume too much. We can decrease the quality of care through undercare. Some of our larger employers fear that managed care is not going to give enough care when it is needed.

Finally, if we increase volume, we can improve quality in some cases because we know there's a learning curve in medicine. There have been some fabulous studies that have come out in the past year about the morbidity and mortality rates from coronary artery bypass grafts. This is a very common procedure; it's very clear that the more that you do the better the outcome. This is the concept that underlies so-called centers of excellence or selective contracting.

If you're a large employer who wants to go about some sort of evaluation process to look at some of these things, what will they be looking at? Typically, when you look at an HMO or managed-care organization, you see provider relations that credentials the providers and establishes a network, quality management, utilization management, and member services.

Provider relations. What is a provider relations function in a managed-care organization? They're responsible for selecting the hospitals and typically they select the hospitals according to the following variables: location, services, reputation, efficiency, accreditation, and price. These are the minimal things. Take a look at accreditation. Does anyone know of a hospital that's not accredited by the Joint Commission on Accreditation of Health Care Organizations?

FROM THE FLOOR: It used to be Joint Commission on Accreditation Hospitals.

DR. LIPSON: There are roughly 7,000 hospitals in this country. The number keeps getting smaller all the time. There are maybe 2,500-3,000 hospitals in rural areas that are not accredited, but very few of them are participating in a large employer managed-care arrangement. The problem is that when the hospital gets accredited, it frequently has to meet some sort of contingencies or make a correction in six months. They never end up sharing that contingency information with the employer.

One of the things that we have been really hammering the employers about is to ask the managed-care network to require the hospitals to send in that Type I contingency list and their corrective action plan. Of course, the hospitals are very resistant to that.

Provider relations also focuses on the physicians – selecting them, credentialling them, and the most important step, periodically reappraising their performance. We're fairly good about making sure that we don't have fraudulent individuals in these managed-care networks. What's much harder is once the doctors are in the network, what is the managed-care organization doing to ensure the reappointment process. Increasingly, data on specific physician performance drives the ongoing membership decisions.

There are a whole host of things that the managed care network should be evaluating on the front end to make sure that the doctors are who they say they are:

- Medical license/BNDD
- Board certification
- NPDB report
- Malpractice coverage
- Malpractice experience
- Medical staff membership
- NPDB report
- Practice site review

National Practitioner Data Bank (NPDB) is listed twice. That's because it's very important. NPDB is a national clearing house of bad health care providers. It includes all people who have had malpractice judgments against them. They've been disciplined by state medical boards in some way. And the problem is that the data bank doesn't have a whole lot in it right now and it hasn't proved to be all that useful, but we hope that it will be.

I mentioned the reappraisal process. We make sure that after people are in the network that they earn the ongoing right to remain in the network. We should be asking our large employers to ask their managed-care organizations what they are doing on health history. You would be astounded by the number of physicians in this country who have some problem with chemical dependency or other types of impairment. The ones that are known to us are the ones who have gotten help. They tell us that we've really only touched the tip of the iceberg. What is the managed-care organization doing to address that problem? What sort of profiling of member reactions to individual physicians is being accumulated? Is there a system that actually can take telephone complaints from members, aggregate them by individual physician, and inform the credentials committee at the time of reappointment? These again, are some of the things that employers can be looking for in their managed-care arrangements.

Let's go on to the next managed-care network function, quality management. Classically, quality management, formerly known as quality assurance, was case-based. We were trying to locate the bad apples -- identify the bad doctors and throw them out of the barrel. As is true for total quality management (TQM) concepts in general, there's now a movement to move off of the bad apple type of approach and identify problems with processes as opposed to individuals. And some of the ways

that this can be done is to look for sentinel events or target diagnoses and also to implement centers of excellence. Some examples of sentinel events would be, how many times does someone have to return to the operating room within 48 hours for the same procedure? It's a redo or rework in TQM parlance. I know doctors have rework. If that happens frequently then maybe there's some kind of quality control problems in the operating room or with a particular kind of procedure. What are readmission rates for the same medical diagnosis within 30 days? How many unexpected deaths are there? I clarify this with unexpected because if a patient is 73 years old and has cancer of the pancreas, the outcome is bleak. If you are a 26-year-old and you're going to the hospital with pneumonia and you don't come out of the hospital, that's a whole different issue. So, it's the expectation of death that is a marker here.

Also, there's an interesting list of diagnoses that may be markers of suboptimal antecedent out-patient care. What that means is if you have uncontrolled diabetes and you get admitted to the hospital, it could be that the management of your diabetes on an out-patient basis wasn't optimal. It could also be that you didn't go to the doctor until it was too late because you hate doctors. So, there are multiple explanations here. But does the managed-care network have a method for tracking the occurrence of these kinds of diagnoses: breast cancer, hypertensive crisis, or blood pressure that goes so out of control that you have to be hospitalized. I happen to be a pediatrician and am very interested in status asthma. It's intractable asthma that's not very treatable with drug therapy. Kids end up in the hospital. It's a very common cost-driver of childrens' acute hospital costs. The managed-care organization tracks these things. Other than status asthma, some of these events occur relatively infrequently. So, you do get into the problem of small numbers, but at least they are markers of things to be looking at.

Finally, there is the concept of centers of excellence. Transplants will not be done everywhere. And the sicker you are or the more technology you need, or the more dangerous the procedure, the more likely you are to travel a long distance with your family. Typically, these arrangements have been done for fairly uncommon procedures, like transplants, but they're increasingly being applied to things that are more common. Coronary artery bypass graft (CABG) is the procedure where, if you're in danger of having a heart attack because the blood vessels that are in your heart are blocked, new vessels are attached to increase the blood flow to the heart muscle. It is a very common procedure. How do you determine whether a hospital should be a center of excellence for CABG? Is the person still a patient after one year? What's the operative mortality rate? What's the minimum volume? Do you want to go to a hospital that did 500 CABGs or one that did five, or ten, or fifty? I think that the answer is basically evident.

Let me close with some remarks on a specific process that employers can go through. We found this to be very useful for those employers that really do want to look carefully at their managed-care arrangements. There are three issues: timing, techniques and accreditation. We can evaluate managed care at different times during which an employer offers these things. Obviously, you can do it as part of a feasibility study. Typically some kind of network assessment relative to quality and utilization control is done during the feasibility study. But you can also do it as part of

your preimplementation and vendor selection process. After you've selected your vendor, but before you've gone live, you can do a more intense evaluation.

Finally, you can monitor these arrangements. You put them in place and then after six months, twelve months, or eighteen months, you can evaluate this whole vendor selection process to see how it is actually working out in the field. In some cases you will need to look at documents and actually do an on-site evaluation. When you look at your documents, typically they are the documents that are the underpinnings of those four functions that I mentioned: provider relations, quality management, utilization management, and member services. So, all of these things are sort of the managed-care organization's underpinning from a paper point of view. The problem is that these documents can look great but not necessarily tell you how well anything is being executed. That's why you have to go on site. One possible exception appears on the curriculum vitaes. You want to assure that senior management at these organizations has been in place for a period of time and are well qualified to operate the organizations. This is a necessary, but not sufficient condition for a successful organization.

Now, what about the on-site evaluation? You can obviously evaluate with different levels of intensity, but one of the things that we try to implement at this execution variable would be to observe nurses taking calls for preauthorization of hospital stay. We listen in on member services calls in the states that don't have a privacy law prohibiting it. You listen in on a remote telephone and take notes. You can look at some confidential minutes and proceedings. Typically, there's the Quality Management Committee minutes and there's the "real" minutes. They won't send you the real minutes through the mail, but when you go to the office and say, "Can we see the minutes?" they unlock this drawer where they have this really good stuff. You want to see what they are doing with that information. I really don't mean to be glib. This really is the way it is.

The medical director tends to be the key person in terms of upholding quality and how the well managed-care organization does on quality and utilization control. And you have to go eyeball to eyeball with that individual. There just isn't any other way to do it. You must spend a couple of hours with the medical director to get a good sense of whether this person is in their third career. Is the person getting along in years and sort of on their way out? Or has the person taken this on with zeal? Are they on a crusade? Are they going to make managed care work in their community if it's with their last dying breath? You need that kind of medical director to really achieve success in managed care.

When we run through this evaluation process, there are certain things that we see at the best managed-care organizations. They have true total quality management (not just quality assurance) programs in place. They're involved in outcomes research. They have risk-adjusted outcome data. Typically, when you go in and look at data, everyone says, "Well, my data is terrible because my patients are sicker" but they can't affirm or deny it. That used to be true. Increasingly, good risk adjusters are available and people are using them. On-line capabilities from a computer standpoint are needed to help a provider determine eligibility and maybe submit claims and have a medical record.

Are they looking for new ways to apply managed-care techniques to things like short-term disability and workers' compensation? It's a very controversial area. Targeted prevention strategies is another good practice. Not all prevention works, but some prevention does. They use high-level customer polling, not just through surveys, but through focus groups and other methods to assess how the members are getting along with the program. Finally, do they have those integrated report cards on individual providers using data from everywhere in their operation?

MR. RESNICK: Right now, I'd like to turn the program over to Bob Nelsen. Bob is going to talk to us about another technique that large employers can use in their arsenal to help control the long-term cost of these benefits. Bob's going to talk to us about health insurance futures and how larger employers who are self-insured might want to use health insurance futures to replace aggregate stop-loss insurance. Bob has 21 years of experience in the group insurance industry and I had the good fortune to work with Bob for many years early in my career. Bob spent seven years at Association Life in Milwaukee doing underwriting, pricing and administration. He was with Employers Health in Green Bay, Wisconsin, for 14 years. Many of you might know Employers Health as being a very large insuring organization in the small employer health market. Bob has a lot of knowledge on managed competition and other things. On April 1, 1993, Bob became an independent consultant. I'll now turn the program over to Bob for a discussion on health insurance futures.

MR. ROBERT J. NELSEN: Let's get to the interesting topic of health insurance futures. I will talk about those futures and give a little bit of background. Before you can relate those futures to their possible use by large employers at some time in the future, you have to understand what they are. I'll mention what futures contracts are in general. A future contract is a standardized agreement to buy or sell a commodity or financial instrument for delivery at some time in the future at a price discovered in trading on an exchange floor. Examples of commodities are: oil, grains, livestock -- things that are commonly traded on some trading floors.

There are a number of exchanges that deal in futures. Health insurance futures are a relatively new phenomenon. They were designed by the Chicago Board of Trade and actually have been developing for several years. The idea is to reflect the market's expectation of changes in health care costs. We judge and trade based upon an index developed from a pool of insurance policies. In other words, data are submitted and from that data a representative index of where health costs are going is constructed.

One of the real reasons that health insurance futures were designed is they were intended to enhance the capacity of insurance companies to manage their underwriting profitability. A term that's used is hedging. In other words, if there is a relationship between a health insurer's results and this index, it can be traded in such a way that if the insurance company's loss ratio turns out to be higher than expected, money will be made on the futures and it will offset it. So, we are managing underwriting profitability by using health insurance futures almost like reinsurance; you could conceivably look at them like reinsurance.

Similarly, futures can be used by hospitals and self-insured companies for similar purposes. If there is that relationship between what makes for their profitability or

lack thereof, futures contracts can be used as a tool to confine the results of those entities. Obviously, we're going to talk a little bit more in depth about self-insured companies. If trend is higher than expected, claims are higher and make money on the futures to offset it. The price you pay is on the other side. If claims turn out lower and trend is lower than expected, you do better on your claims, but there's a price to be paid in the financial instrument. As I mentioned, trading is based upon an established database.

Based upon information submitted by a number of insurance companies and Blue Cross/Blue Shield organizations, it is a small group health insurance future contract at the moment. If the future contract is successful, there will be more versions of it. But the database that has been developed or is being developed comes from seven to ten insurance companies and Blue Cross organizations that contribute data. Employers Health Insurance was one of those contributing carriers. Specifications are based on group size, benefit levels, deductibles, coinsurance, and renewal terms. Those carriers submit a certain portion of their business and the experience on it to the entity who creates this database. Groups with 25-500 employees are covered. The covered benefits need to be either indemnity plans or PPO plans. There are specified levels of deductibles. The deductible can be no more than $500. The level of coinsurance is generally no lower than 80% except in PPOs when out-of-network benefits can be lower. There are annual renewals of business to be sure that the business is going to be with that carrier for the whole year because data need to be tracked for a whole year.

The data include demographic information, location of employers, premiums and claims data. A certain amount of this information is submitted at the beginning, and then there's a monthly reporting of premiums and claims as more information becomes available.

An index is then established from the data that are submitted. A pool manager actually is involved. The Board of Trade hired Coopers & Lybrand to be the pool manager. Coopers & Lybrand takes this universe of data and takes a subset of it. As it turns out, most of the data is included in the subject. It tries to make it representative of the national health market. It wants to make sure that all of the business isn't in one state. Once it does that, reports are generated. That is, it goes back to the contributing carriers, but also will become the public information which is the primary data that folks can use to judge what this index is going to do. You track the future. You see what it has done through periods of time and that's one of the reasons for trading it.

The index is currently comprised of the January Pool. What that means is that it's all business that was either written as new business or business that renews January 1. So, that's one of the subsets of the carrier business that they submit for this. And again, that's one of the things that's key to making it something that will be trackable over a period of time and you take out some of the variables that would confuse matters otherwise by doing that. There's this one chunk of policies that I'm calling the January Pool, but actually there would be four quarterly contracts that would be traded during certain parts of the year. So, it's kind of like four different deals, but all use the January Pool based on calendar quarters.

The price that somebody has to agree to sell at and somebody has to agree to buy at is based upon a loss ratio on this pool times $100,000. In other words, an 80% loss ratio would translate to $80,000. So, if you bought one of those contracts and two parties agreed on $80,000, that would be the price and adjustments would be made from there. I'll talk a little bit more about that later, but the buyer and seller make or lose money depending upon where that loss ratio really ends up compared to that 80% or $80,000 that they agreed was a fair price to buy and sell it at.

The health insurance future is expected to be traded soon. It's been in development for a while and it's still being worked on. If it actually trades for a January 1994 pool, we look ahead and say, it's going to be traded – there is going to be a January pool that will be traded next year, which is one of the possibilities. There's a fairly high probability of that happening. Table 1 shows the four contracts that would relate to 1994. The June 1994 contract relates to when the thing actually ends trading or when the thing settles, or approximately when it settles. The first one is called the June 1994 contract. All would likely start trading at the beginning of the year even though no data would be included for premiums and claims for the later contract. It still could be traded in anticipation of what that is going to be. The June 1994 contract would start trading in January. It would end about June and settle about that time because it's really based upon the first quarter premium and claims on these policies. Actually, it's the quarter's premium and claims incurred in the first quarter, but paid through six months. In other words, there's a quarter of run-off of claims that's included. It doesn't go forever until all claims are done, but it has another quarter tacked on. A similar condition exists as you go to the other four contracts. You could buy contracts at the beginning of 1994 that wouldn't settle until 1995 for the fourth quarter. So, these would be things that would be traded on January 1 and could be used for these purposes.

TABLE 1

Contracts	June 1994	Sept. 1994	Dec. 1994	March 1995
Approximate Start of Trading	1/94	1/94	1/94	1/94
Approximate End of Trading	6/94	9/94	12/94	3/95
Quarter Covered	1-3/94	4-6/94	7-9/94	10-12/94
Claims Runoff Through	6/94	9/94	12/94	3/95

As I mentioned, developments have been going on at the Board of Trade in Chicago for several years. The development of health insurance futures started at least as long ago as 1989. Some people were talking about a health insurance future and trying to get it going sooner. They recruited most of the carriers that are submitting data in the time frame of mid 1991-92. Initial data collection was going on from early 1992 and really is now a continuing process. The future isn't trading yet, as I mentioned; it's still in the developmental stage.

There was the idea for insurance futures, which actually was developed even before the health insurance future. The catastrophic casualty futures started trading towards

the end of 1992. So, there is one up and running on the casualty side. The casualty future is not very successful yet. In general, futures take a while to get going. The casualty future doesn't have as good a design as the health insurance future, and has not been terribly successful yet. They're still optimistic that it's going to work, but it's taking longer than expected.

As I mentioned, the health insurance future is not trading yet. It's been in development for a while, but it has been affected somewhat by the health care environment. On one hand, there is so much uncertainty. There is going to be new information coming from Hillary Clinton's group. There's a belief that not as many people will want to jump into this until at least some of that uncertainty is gone. On the other hand, most of the success of these future contracts is enhanced by uncertainty. The reason that people are really interested in them, assuming that they can find a way to use them for either speculation or hedging, is because they can better predict their results, and it's actually an impetus to development. But it certainly is being affected by the health care debate.

The trading date is likely to occur in late 1993. Regardless of this whole situation, the Board of Trade has put in a lot of time and effort and it is going to kick it off. Futures start slowly and build. They do require both hedgers and speculators to be present to get enough folks to want to do the transactions. Insurance companies and large employers will use futures for hedging and to better predict results. It is like reinsurance in many ways.

For large employers or insurance companies, the key word is correlation. To make it work as a hedge you must be able to quantify the correlation between the business trying to be hedged with the index. The whole idea is to know that if trend is higher than expected, the hedger's claims will be higher and so will the index. And if the future is traded in the appropriate way, money made on the futures to offset unexpected losses on the claims side for the hedgers. If things turn out better, you will make more money on claims, but lose some money on the futures. If you do have the correlation and you can deal with it appropriately, you can take a result. And again, that's where the analogy to reinsurance comes from. So, for the large employer, it could be traded. Employers could become involved by hiring somebody because they're probably not going to know everything they need to know. Consulting firms and actuaries may be hired by large employers to learn about all of this stuff if they can be convinced that this is something that could help them.

People could be contracted to do actual trading, to make trading decisions, and to review the trading. Determine the correlation. Convince the employer that it's there and help them do it.

A health insurance future could be something that could be packaged by the health insurer or a consulting firm so that they actually do the trading and are taking the risk of the future contract and are selling it to the employer as the basis for a stop-loss. So, on one hand, it's actually the employer that would be doing the trading and he wins or loses based upon where the thing goes.

Somebody could actually take the risk of the future contract, but use it as the basis for selling the employer an aggregate stop-loss.

In addition to correlation, the other key is you don't know what the market is going to be like and where it's going to trade. A hedger would normally buy these contracts. They'd have to find somebody who was going to sell them and they'd have to buy them. You'd normally say, if I can get it for $80,000, I know there's this correlation and to the extent trend is higher, claims will be more than we thought they were going to be, and the index is going to be higher than $80,000 and this is going to be an offset. A buyer will buy it at $80,000 or less. Anything less than that is a bonus if you think you know what it's going to be. Somebody using it for hedging will not buy it at $80,000 if he can get it for $76,000. Are there going to be the buyers and sellers and where is the market going to be? Is there going to be somebody who's willing to sell it for $80,000 or less? So, those are obviously details that don't get worked out until the thing is up and running.

Whether it's an insurance company or a large employer, no matter how big the block or their self-funded plan is, both must know where their claims are and where they're going based upon a certain trend assumption. But there is only so much history available when you start out such a contract on the index side. The January pool is the one that was submitted. There's some history from 1991. The year 1992 is generally full. And 1993 will be full by the time it starts trading. It's a fairly homogeneous block. So, you can draw relationships between the block you're trying to hedge and the index. Certainly there will be better history down the road.

So, that's what health insurance futures are about, and that's how larger employers could use them. I'm fairly optimistic that the thing is going to get off the ground. I'm not exactly sure whether they will survive, but they're likely to start in late 1993 or early 1994.

MR. RESNICK: If the freezes in fact, happen, they are likely to impact health insurance futures trading in a fairly significant way. My second observation concerns how large employers actually respond to managed competition and health care reform in general. I think that the answers are not entirely clear. Those of us that are on the consulting side of things realize that there are many challenges ahead for the large employer.

MR. ROBERT A. HANSEN: I have a question for Dr. Lipson. You mentioned the importance of using risk-adjusted outcomes measures and assessing the quality of care. I was wondering if you have done any study of the various techniques and, if so, have you reached any opinions as to which technique works the best?

DR. LIPSON: There are a number of commercially available risk adjustment systems out there that have been in the press. And rather than recommending one, let me just mention some names. What I mean by risk adjustment is that you make an adjustment for the pretreatment risk of the patient's particular medical condition and diagnosis. Through that risk adjustment process you compare patients that may have the same diagnosis, but have other morbid conditions, for example, or other complications that actually might require them to eventually use a more intense level of service. So, in order to compare apples with apples, you make this adjustment.

System Metrix, a division of McGraw-Hill, has a system that is being used by a fair number of hospitals and medical groups. There's a group called Medis-Groups, which

is a case mix adjustment technique or technology that has been developed by the Medi-Qual Company, which is a division of Inter-Qual. I don't know how many of you are familiar with these companies, but they are some of the leading companies in developing utilization review criteria and quality management criteria. Dr. Susan Horn has the computerized severity index. So, there are a number of them. They all have their strengths and weaknesses. I think that in terms of the commercial usage, the Medis-Groups' is in commercial use and has the greatest volume of data. For example, in the state of Pennsylvania, all hospitals are required to use the Medis-Group system to risk adjust their outcome information so that people in the state of Pennsylvania can decide whether there's a meaningful difference between hospitals in terms of outcomes and death rates and things like that.