

# RECORD, Volume 28, No. 2\*

---

San Francisco Spring Meeting  
June 24–26, 2002

## Session 92PD Evaluating Managed Care Networks

**Track:** Health

**Moderator:** ROBERT N. PARKE  
**Panelists:** STEVEN J. GASPAR  
ROBERT N. PARKE

*Summary: This session discusses various techniques for evaluating the success of an existing network. In this case, success includes profitability, risk exposure and long-term viability. Topics include network design issues, provider additions and deletions, and quality measurement and consumer satisfaction. At the conclusion of this session, participants gain a better understanding of the differences in evaluating a network and are exposed to ideas to combat these complications.*

**MR. ROBERT PARKE:** I'm from Milliman USA in New York and we'll be talking about evaluating managed care networks. Steve Gaspar joins me today. What I want to cover with you is the current environment as I see it and what that means. I also want to discuss challenges for network management and talk about some of the evaluation and management tools that I think are useful in network management. Then I'm going to take you through an example of some market-based benchmarking techniques that clients of ours have been using (both providers and health plans), for benchmarking contracts. Then I'm going to talk about the future. I'll discuss what I see happening and what some of the implications of this are going to be for network management.

Steve Gaspar, who works for the employer stop loss division of Swiss Re, will be giving you a reinsurance perspective, because they have a unique perspective when they evaluate networks.

---

\* Copyright © 2003, Society of Actuaries

**Note:** The chart(s) referred to in the text can be found at the end of the manuscript.

First I will give a brief outline of the way I see the current environment. There's been a return to rapidly increasing costs, and interestingly enough from our perspective at the moment, hospital costs are becoming the major driver. Prescription drug costs, while they're still increasing, seem to be relatively predictable at the moment. With the shift to triple-option drug plans, they're relatively predictable, so while plans are not happy with the level of drug trends, at least they feel that they can manage them. Some of our clients have been experiencing hospital cost trend rates in excess of 25 or 30 percent, particularly on the hospital outpatient side. I think the reason for that is because it has been an area that has been relatively loosely managed by a lot of health plans and it has now become a revenue center for many providers. This ties into my next point.

There is increased provider sophistication. The providers that you're dealing with on the hospital side, particularly with growth of large systems, are significantly more sophisticated than they were some years ago. Particularly among some of the hospital systems that we work with, I would say that the balance of power has shifted to them in the negotiations. They have more data. They're better prepared and they understand what's going on a lot better than the health plans. A lot of that, I would suspect has been driven by the use of consultants they haven't used in the past. A big source of business for firms like ours these days is working with providers in their negotiations with health plans.

It's not unusual these days, for example, on the hospital outpatient side, for a provider organization to present us with an outpatient fee schedule and ask us to analyze it for them. We are usually in a better position to analyze it for them than the health plan is. The health plan typically hasn't collected data in the past in a way that they can realistically assess the impact, particularly on the hospital outpatient side. They haven't collected information on what they were paying for some of the implants and the drugs. I think that some plans lose sight of the fact that the hospitals didn't get where they are by being stupid. These are often huge organizations, which in many ways have revenues well in excess of the plans they're negotiating with. They didn't get that way by not understanding their business.

There's been a shift away from risk contracting and in some ways, however, from my perspective, that's a little overstated. It is often more of a repackaging. Also, a lot of providers that should never have been in risk, that neither had the management infrastructure or the information systems to support it, have gotten out of risk. The ones that are still remaining in risk are committed to risk, but not at any price. They will say no to a poor contract. What do I mean by repackaging? For example, a big tertiary client of ours with numerous affiliated hospitals and provider organizations tells me they're getting out of risk. That means they've now moved to a system where they have a 10 percent withhold, but the withhold is returned based upon the overall performance of their risk pool. To me that sounds like risk contracting with aggregate stop loss. To them it sounds like a shift out of risk contracting; it's not, in my opinion.

The other thing to bear in mind when you're talking about the increased sophistication of these plans is that they view things from a very different perspective than the health plans and that doesn't mean they're wrong. Their business model is different from the health plans. For example, if you look at a Medicare risk contract from a hospital's perspective, it makes absolutely no sense under any circumstances for a hospital to sign a Medicare risk contract unless the health plan has the ability to shift admits from a competing institution. Health plans will come to hospitals and show them projections that they can break even under the budget being proposed, if they meet these so-called targets. But they're forgetting where the hospital is coming from. They're coming from an environment of fee-for-service Medicare and the revenue that they receive under fee-for-service Medicare is significantly greater than the total revenue that is available from a Medicare risk plan. The net effect of a Medicare risk plan is a direct shift in revenue/assets to members and to health plans. The hospitals and provider organizations are starting to understand the full implications of health plan contracts and account for it in their modeling and thinking.

Another thing to remember about hospitals is that a lot of their costs are fixed. So if they manage to fill beds it is to their advantage, particularly in the case of Medicaid. It still makes a lot of sense for the hospitals to get into Medicaid risk arrangements because of the extra revenue they can generate from things like graduate medical education, uncompensated care, etc. I'm trying to illustrate that a hospital's business model is different from a health plan. It will be very difficult to negotiate with these institutions and providers unless health plans understand their business model. In my experience this is often lacking when health plans negotiate with hospitals and other provider organizations.

Another thing that is in the news at the moment is consumer-driven health care. From my perspective, consumer-driven health care offers to reintroduce to the consumers of health care the real cost of access. That was the failure of a lot of what was going on with managed care over the last few years. It sheltered the ultimate consumers and the purchasers of health care from their choices. It gave them everything, consumers could access any provider they wanted for no cost. So all the health plans started to look the same. Consumer-driven health care has begun a shift to holding consumers accountable for their choices and bringing into the equation the cost of those choices.

Unfortunately, in my opinion, there's been a shift away from provider accountability. Providers are no longer being held accountable, but this could change. A few years ago we were holding providers accountable for everything and the members and the purchasers for nothing. We told our members that they could go and see any and every provider. A lot of HMOs had 98 percent of the providers in their network and they had risk contracts with providers and member referral processes that didn't support any form of effective management. That was inequitable. So now we've swung completely to the other side. We hold the

member entirely accountable and the provider not accountable at all. My hope is that over time we will reintroduce some balance. From everything I'm hearing from the consumer-driven initiatives at the moment, they've gone too far and they're really getting back to indemnity plans that don't hold providers accountable in any way whatsoever. That's missing the boat a little bit, but that's, again, a personal perspective. Consumer-driven plans are not the entire solution, but they're part of the solution. We need to find that right balance with them.

We're starting to see the re-emergence of limited network and tiered products. This gives plans a powerful network management tool when they are negotiating, and we are starting to see purchasers starting to consider the price and other implications of limited network products.

Medical management. A lot of the health plans have been spooked by the managed care backlash. A company like ours is intimately involved in what is going on in the medical management side and there's a trend towards less intrusive medical management. What that really means is information sharing. It's identifying and showing the information to the providers. For example, it's identifying patients that need extra attention and letting providers know.

There's also been a growth in disease management programs and predictive modeling. Predictive modeling is scouring data to identify issues and areas for improvement—for example, organizations that use claims data to identify drug interactions and identify patients that would potentially benefit from certain interventions, and then issue recommendations to the physicians. The big issue around these programs is whether they are going to save money. We're often asked to comment and look at all of these models. They generally increase cost although they promise cost savings. That's not to say health plans shouldn't be introducing these programs, but they should understand what they're getting into. If you're looking at disease management and predictive models to save money, you probably need to look a little closer. There's an argument, and I agree with it, that these programs will ultimately deliver what managed care has promised.

The other thing in the current environment that I think is important is the rapidly increasing information system capabilities of many organizations. That's important for the development of credible severity measures and the predictive modeling tools that we've just been talking about. Certainly, some of the early models like DxCG's models that adjust patients for severity produce fairly impressive results, but they are incredibly data intensive. We have one client that is now using severity adjustments to adjust their global capitations. It is a fairly significant organization with about 250,000 or 300,000 covered lives. One of the factors that it is using in establishing capitation rates is DxCG's full model; not the one being used for Medicare risk plans that are a little counterintuitive. Early indications are that it's working as intended, but it's very, very data intensive. Don't underestimate the network problems that these approaches can cause. It's a zero-sum game. If you give more to one, you take from another, and this causes problems. With this

client, we had to go through an 18-month facilitation process and implement a number of transition arrangements.

That's the way I see the current environment, and this will frame the discussion that I want to have with you.

I see network management as constant vigilance and evaluation to contain the dissatisfaction and maintain margins. It's a financial exercise. At most I say contain dissatisfaction. If you don't have some dissatisfaction in your network, you're paying too much money. Maintaining margins is important. It's amazing how many plans will increase their provider contracts without any understanding of the impact on their bottom line. Health plans, even not-for-profit health plans, need to maintain their margins or what are they doing in business? That's something that a lot of people lose sight of. Again it's a financial exercise.

Quality measurement plays a limited role in this. I am not aware of any plans or organizations using quality in any meaningful way to pare down or select their network.

Understanding your market is key to network management, and there are a number of ways for you do this. Your network contracting staff is a source of information. You do, however, need to filter what they say, because obviously they have a unique perspective that isn't always the right one, but it's a very good source of information.

Market-based benchmarks. These will provide validation for what your network management staff is telling you. I'll take you through an example of some of the tools that clients of ours are using for this. What are the model contracts that your network contracting staff should be using? Also, what is the formal exception process? What are the parameters within which your contractors can negotiate? When can they not negotiate and what process do they need to go through to understand when it's appropriate to make exceptions to model contracts? As part of this process, you will need to provide a benchmark. You need to look at the total costs of provider utilization as well as the unit costs. Ultimately that's what drives total costs and there are significant variations across parts of a network. Even after age, gender and severity adjustments, there are significant variations in terms of utilization and they should be factored into contracting decisions.

Effective reporting is important. The tool that we use and that we sell is MedInsight, which in our opinion gives you complete information. It gives you the ability to roll up all of your provider information and drill it down. It's complete and it uses claims-based data. It never ceases to amaze me as a consultant how little some significant institutions are using the information that they have available. A lot of information is there, it's just not collated, sorted and summarized in the right way to be used effectively.

Also key to effective network management is understanding your constraints. This may come as a shock to some people, but premium rates are the ultimate constraint. Premiums set the budget. It's how much you can afford to pay your providers, so you need to use them and establish targets.

Another thing to understand is your market position. Do you have dominance in your local market? Do you have membership that gives you an edge in that negotiation? This is an interesting situation because, in my opinion, the disappearance of effective medical management means that contracting is really going to become more and more important. In some ways the national players are going to be at a disadvantage because of their lack of dominance in any local market.

Another thing to understand about your constraints is the effectiveness of your medical management program. That is from a cost control point of view. If your medical management is effective, you can afford to pay more on a unit cost basis. Also, don't forget that if your medical management is effective and your market allows it, there is the possibility of shifting services to alternative institutions and alternative providers.

How do you measure effective network management? What does managing effectively actually mean? In a way, managing effectively means meeting your sales targets, because that's what health plans are selling these days. So how effective you are at meeting your sales targets is really the ultimate measure of whether you're effectively managing your network.

Good network management means using all of these tools to identify areas for improvement and coming up with a strategic plan to improve. That means anticipating provider demands. I have clients that know that they pay under market, but they're obviously not going to throw money at the providers and say we've been paying you too little. However, they are anticipating some push back from the providers because the providers ultimately will figure it out. In my opinion, an aggressively reactive stance is the most effective way to manage this. You want to be willing and able to respond when you need to, but you don't want to throw money at the problem when you don't need to.

This is a relatively simple point, but you need to manage your publicity. In many ways the providers have been much more successful than the health plans recently at managing the publicity surrounding their contractual disagreements. What managing your publicity really means is having a clear, simple message that contractual increases will have an impact on cost and increase premiums. Ultimately, that's often lost in the message. If plans pay more to the providers, consumers will ultimately pay more.

Tools. Credible, complete reporting is important. That's relatively obvious. Severity adjustment is also important. Some of the severity adjustments that we

would use are from DxCG. We also use the Milliman resource-based relative value schedule (RBRVS) for hospitals. We've expanded the scale to include hospital outpatient services. As an example, I had a very significant national client that was concerned about what it was paying in a specific state. It was having all sorts of disagreements and arbitrations with some fairly dominant tertiary hospitals in the market, and the hospitals were much better prepared than the health plan. When the health plan severity-adjusted the data, however, the picture changed. They were actually paying much more to the small community hospitals on a severity-adjusted basis.

Limited network products are a useful tool. These limited network products and benefit designs such as tiered products can be used as negotiating tools. The providers are nervous about these plans. They don't like to be held up to public scrutiny for one thing. While some of the health plans I'm familiar with are not expecting these products to generate huge sales, they are using them as contracting tools.

Quality management. Quality does not impact network management very much. I'm not suggesting that it is not important and it's not going to become more important. The National Committee for Quality Assurance (NCQA) measures and some consumer satisfaction measures are viewed as quality, and access also gets caught up with quality. Consumers often view access as the same thing as quality. Recently, there has been the development of effective quality proxies in the medical delivery system. Chart documentation is an example. Effective chart documentation is becoming used as a measure of quality. In my opinion, it doesn't really impact the network management very much at the moment, because of significant provider resistance. The credibility of these measures is actually not great. When you actually start examining some of these measures, you see that they are not true quality measures.

Also, there's customer pressure. Customers, at the moment, are much more concerned about costs than they are about quality, particularly with the rapidly increasing premium. In addition, most purchasers of health care are starting to be very wary of the promises made around quality. Disease management promised huge savings. Predictive modeling promised huge savings. Quality management always promised huge savings. However, when you actually analyze the programs, all of them usually add an extra layer of cost.

In addition, there are some risk issues that plans need to think about. For example, if a health plan identifies quality problems with a provider and doesn't act upon it, are they exposing themselves to additional liability? And, by acting upon it they are going to cause all sorts of network problems. Most health plans don't have processes in place to effectively deal with those kinds of issues.

Table 1

**Market Based Benchmark Example**

Benefit	Net Medical Cost		
	(1)	(2)	(3)
	Utilization Per 1,000	Average Cost	$=(1)*(2) /$ 12000 PMPM
<b>Hospital Inpatient</b>			
Medical	101 Days	\$1,020.23	\$8.59
Surgical	87 Days	1,934.23	\$14.02
Cardiac Medical	14.0 Days	2,034.23	\$2.37
Cardiac Surgical	10 Days	3,945.24	\$3.29
Behav. Health	24 Days	953.23	\$1.91
Maternity	32 Days	1,290.32	\$3.44
	167 Days		\$33.62
<b>Hospital Outpatient</b>			
Emergency Room	201 Cases	\$353.23	\$5.92
Surgery	93 Cases	1,203.23	\$9.33
.....	.....	.....	.....

6/25/02

Table 1 is a brief example of a contract benchmarking approach that some of our clients are using. Bear in mind that we do this for both providers and payers. I'll use a hospital-contracting example here because it's easier to think through some of the issues. Most of the clients that we're working with use these models to compare contracts across hospitals—both payers and large hospital systems. In addition, many of these large hospital systems use this as an internal management tool to identify how effective their contracting has been at the local hospital level. They're also starting to use the results to terminate certain plans.



Table 2

**Market Based Benchmark Example**

Hospital Contracts

Standard Utilization					Payer Fee Schedule				
					(4)	(5)	(6)	(7)	
					=average [(4)+(5)+(2)-1]/2				
					Per Diem				
					Day 1	Day 2 +	Average	Case Rate	
INPATIENT	DRG	SVC	Admits per 1,000	Days per 1,000	ALOS	= (1b) / (1a)			
	1	S	0.2198	1.4608	6.6460	1,200.00	1,200.00	1,200.00	-
	2	M	0.0329	0.2429	7.3830	-	-	-	5,000.00
	3	S	0.2094	1.7550	8.3811	1,340.00	1,340.00	1,340.00	-
	4	S	0.0453	0.0994	2.1951	1,340.00	1,340.00	1,340.00	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-
TOTAL		Surg.	0.4745	3.3152	6.9868				
		Med.	0.0329	0.2429	7.3830				

6/25/02

In Table 2 we estimate average health plan experience in a specific geographic region. There's a range of published and unpublished data sources for this. We use the Milliman HMO/PPO rate survey, the Milliman Health Cost Guidelines, and additional proprietary databases and we adjust them for any experience that we have. We then take the contract from the plan or the hospitals and we match these by broad service category and weight each category of service by utilization to compare results to the market-based benchmark. For example, if it's a DRG contract, you'd weight it by admits. If it's a per diem contract, we'd weight it by admits and average length of stay. For outpatient services we'd weight it by utilization in broad service categories. Also, there are some adjustments that you need to make. For example, certain health plans would include physician services in their per diem rates. Also, it wasn't unusual a few years ago for certain plans to have anesthesia as part of their inpatient rates. So you need to make adjustments to account for contractual provisions like this. You may need to make adjustments for ICU rates, or for the mix of services a hospital provides.

Chart 1 shows the kind of benchmark that we're using. It's a typical actuarial cost model in which you're constructing that benchmark and you're comparing the roll-up of these hospital contracts against that market benchmark, so you can express everything as a percentage of market. This is actual information. This was an example, for a health plan, of certain hospitals in a geographic area. Clearly there's a different benchmark for their PPO plan and their HMO plan. This was a weighting of all services just to give a sense of what the plan was paying the hospitals. Hospital E had a unique situation. It was a teaching hospital and typically, when we look at teaching hospitals they still manage to command, on average, a premium

of about 10 percent for the same service compared to a community hospital.

Chart 2 is for a specific hospital that we were looking at. When you're looking at a large hospital system with multiple payers, they have significant amounts of information for benchmarking their contracts against each other. We find that a lot of plans and payers tend to view their contracts very simplistically. They look at the per diem rates and decide if it's a good deal or not. But, when you're actually weighting by utilization and accounting for some of the carve outs and adjustments, it doesn't always look that way.

Chart 3 gives us a look at ambulatory surgery for that same group of hospitals. The reason we're looking at this is because when you're looking at certain service categories, there are additional things that you need to think about. For example, in this situation, the market for ambulatory surgery is not defined by hospitals alone. In this market there were freestanding ambulatory surgery centers, which have significantly lower costs. So when you weight that into the equation, it looks like they're paying above market for those rates. It comes down to a definition of what's market.

Chart 4 shows the same sort of thing on the hospital outpatient side.

These examples do not take efficiency into account. You do need to take the efficiency of different institutions into account because there are significant differences even after they've been severity-adjusted. Despite all the talk about the managed-care backlash, we are still seeing significant denials in certain markets. Most of those are for administrative reasons. Some of our clients are having about 30 percent of their inpatient days denied for payment. These are not for "medical necessity" reasons; they are for not notifying and documenting appropriately. With effective documentation programs, we have seen certain institutions improve those denial rates from about 30 percent to somewhere around about five percent in six to nine months. That's quite a sobering thought if you're managing to your targets on an expectation of denial rates. This is certainly not unusual for some of the managed Medicaid plans that we work with. It's not unusual for managed Medicaid plans to have very high contracts and to meet their budgets by denying payment.

Another consideration is unique market position. Some hospitals are going to be way above market no matter what you do. Some institutions undoubtedly have a brand name and they're sophisticated enough to use it.

What does this mean and what's going to happen in the future? Again, I believe that ultimately there will be a rebalancing between plan, provider and member accountabilities and responsibilities. As I said earlier, I think the risk contracting of the '90s, in many ways, was inappropriate. It removed accountability from the member and inappropriately held providers accountable for things that they couldn't influence. In my opinion, we've recently swung completely in the opposite direction with some of these consumer-driven health care initiatives. I think that finding that

balance will go a long way toward solving the problems we have with increasing trends and those kinds of things.

Also, I think we will see increased health plan differentiation, because in the '90s you couldn't really tell the difference between the health plans. Everybody was in everybody else's network, everybody had the same benefits, and everybody was equally ineffective in directing care and effectively managing access. I think ultimately we're going to get back to some limited-network, low-cost versus wide-network, high-cost products. In a way, it's a full circle, going back to where we were before we started in the 1990s, with indemnity plans on one side and HMOs on the other, providing different benefits to their members. Again, I think local plans versus national plans are going to become an interesting issue. I suspect that when you're thinking in terms of contracting, the national players are going to have a tough time in certain markets. If a plan does not have local market dominance, the providers are not going to give it good rates. Certainly some of the national players have very large networks and very large membership bases, but they're very thinly spread geographically.

I see an increase in the use and sophistication of predictive modeling, and that's going to have interesting implications for network management. An interesting thing that we've just started to see recently with the rapidly increasing costs is the real emergence of strong but somewhat limited medical management programs. No matter what plans are saying, they're not abandoning medical management entirely. My prediction would be that predictive modeling is going to be used to identify the cases where plans can make a difference and then for these cases the medical management process is going to be just as intrusive as it was in the past. The benefits you have with this are you're not going to upset your network on things where you can't make a difference. You're going to carefully target where you can make a difference. My own view of it is that intrusive medical management still works. It has an impact on claims cost. When you start talking about an impact on quality, that's a different issue.

**MR. STEVEN GASPAR:** About 10 years ago I jumped out of an airplane. To me that was a process that was similar to evaluating the network, in that I had to go through a process of collecting information and evaluating the risk, and then I had to make a call. At the end of the day, when my jumpmaster opened the door and said jump, I had to make a call to either jump out of the plane or not. In the end, I did go ahead and make the call. I did jump out of the plane, and I did land safely.

I'm going to talk about the network evaluation process from my perspective, which is that of an employer stop-loss carrier. We provide self-funded stop-loss protection at Swiss Re, through the employer stop-loss division of Swiss Re, formerly Lincoln Re. At the end of the day I try to make a call by differentiating our rate based on the network that's present. So I'll go through the process for you, and part of it is that I'd like to have you understand some of the key assumptions that I go through within that process.

I collected information in the same way that I collected information about jumping out of the plane. I went and talked to some people who had done it and took a class and kind of evaluated things as they went along. We sent out a questionnaire to the different networks and we asked for certain information. Our process is to cast a pretty broad net to try to collect a lot of information just to see what we can get. If you've done much of this, you find that when you've seen one network, you've seen one network, and you've only seen it one time. A lot of times what will happen is if we asked for a particular set of data that was either not available or if we didn't ask just the right question, we wouldn't get any information at all. So we kept broadening what it is that we would ask for and sometimes we'd get everything and sometimes we'd get only some things, and then we'd try to make sense of it.

So we collect the data, whatever they would provide to us. We try to refine it, and by that I mean occasionally you'll have different sets of information that they gave you. They might give you the contracts and they might give you some savings or some claim information afterwards, and it might not tie. For example, if they're saying that they've got a straight 10 percent discount at a particular hospital and then you see that the charges aren't really following that, or if there's an outlier, allegedly, that reverts to a certain percentage, and you see a claim that should be an outlier and it's not coming up with the same percentage. Occasionally we'll refine the data in that we'll try to go back and ask for collaborating information. Then we enter all that into an actuarial model. I've got a couple of people that do that for me now and I just kind of go through that with them and push and pull out all the assumptions and then, in the end, we make a call. I make a call and I try to assess the network from both a quality and a cost perspective, but then I end up reflecting it in the rates.

In terms of quality, originally this was much of our process and there was a lot of work done on this. We had a nurse who would contact certain individuals at the networks and they would do an assessment and talk about NCQA accreditation, etc. At the end of the day, we looked at how much our outcomes changed in terms of what we were willing to do on rates for the presence or absence of some of these things and we couldn't find any good, hard numbers that would give us a reason to differentiate for the presence of some of these things, and so we eventually dropped it from the process.

In terms of evaluating the networks from a cost perspective, again we cast a pretty broad net. We look at hospital costs. We try to assess which facilities they have, what's in and what's out, and what's absent in light of what we know about that region. If there's more than one product, like an exclusive provider organization (EPO) product or a PPO product, we try to assess which facilities are in and out. We'll look at the arrangements of the contracts, if we get them. We ask for them in our questionnaire. Then we look at physician costs and they are also input into our actuarial model. We look at the reimbursement mechanisms and

how to cost accumulate either in terms of them providing us with a schedule or some percent of RBS, or something like that.

Occasionally we only get combined information, such as information where they give you rolled up claims in a bill versus paid sheet. Sometimes we get only one number for an entire state, and we can't do a lot with that. Occasionally that's all they'll share. Other times we get only excess claims above some number, say \$30,000. From our perspective as a stop-loss carrier, on the specific side anyway, the individual deductibles are a key thing, and that's probably the most important thing that we can get. It doesn't help us on the aggregate side, but on the specific side it's very key. Again, sometimes we get it and sometimes we don't.

We see straight discounts. Those are pretty easy, except there is a little issue there with respect to evaluating them. If you have only the expensive hospitals in a certain area, then what does that really mean? What is this 10 percent discount? It's like a sale at some stores. You have a sale that says 20 percent off, but the price has been marked up. Again, from the stop-loss perspective, we're very interested in the outlying arrangements and we're asking for them all the time. Occasionally you get them and occasionally you don't. Sometimes you're not told that these arrangements exist, but at the same time you get the claims data. If you sort the claims, all of a sudden at \$30,000 everything seems to revert to a 20 percent discount, which you can identify that way as well if you get both pieces of information.

Sometimes we get schedules, sometimes we get case rates, and sometimes we get any combination thereof, like per diems at this hospital, but not for transplants, or whatever. So we take all of that information and we try to drop that on some basis into this actuarial model we have that blends between physician and hospital costs. On the physician side, there are a couple of different ways it can be expressed. Either they'll just give me one number that is a percent of RBRVS or potentially a fee schedule. The issues there are: How long? In what areas? Is this for all the doctors? That's the same for either one of these. The fee schedule may come in by common procedural technology (CPT) code.

Initially we were asking for just a very short list, and we expanded that list little by little based on things that were high cost, high frequency, or both. As we expanded that list, it just became cumbersome to not receive that data electronically. So we tried to kind of force people to give it to us electronically as we kept expanding. It was miraculous that we all suddenly got everything electronically because they didn't like printing it all out.

In terms of the key modeling assumptions, one at the top of the list is the in- and out-of-network assumption, or the utilization. That's a tricky one. A lot of times it's not tracked by a network because they wouldn't really know. Sometimes it is. We typically end up making some assumptions and we build off of our prior knowledge base in terms of making that assumption. There's another issue that is

actually at the bottom of the list, which is grouping or service area. It's kind of related to utilization in that I'll end up with all these arrangements. I know which hospitals are there and then I'll look, for example, at Indianapolis. I'll say okay, they have these hospitals and they have similar arrangements. Well, how do I want to cut this in term of how my underwriters are going to use it? Do I want to express it in terms of a statewide basis, or a zip code basis? If it's by zip code, then how do I group those? So, it's easy when they're all roughly the same. You can just define an area. For my job, grouping is really hard. It's one of the most difficult things to do, because you're trying to determine what the effective range of a particular set of discounts is at a particular hospital.

Credibility. Do I believe what I'm being told? When you ask these questions, it depends on who you get at the network. We've asked the same network the same questions a couple of times and received different answers. One thing in the credibility is that I will never know until after the fact when the contracts have changed. And I always have to price ahead of time.

Another key assumption is the physician/hospital weighting. Now that I've evaluated and, I think my doctor contract is worth 10 points and I think my hospital contract in this particular area is worth 25 points, how do I blend them? Obviously, you'd want to blend and vary those by deductible, and you could use some commercially available public source that could give you some guidance on that. Or, you could use something else, such as your own claims data, or that sort of thing. That is another key assumption.

If you only get per diem information and they're not falling into an outlier situation, you need to decide how to weight those between a medical surgical per diem and an ICU/CCU. Finally, there's leveraging. Given that our average deductible is probably about \$50,000, there's a leveraging effect on the discounting that's occurring. That is material and you have to account for that in some fashion. I already talked about grouping. Like I said, I've got a couple of people that actually do the process now and I end up evaluating what's happened. They come up with the recommendation and I need to figure out whether I think that's a good idea or not. I end up asking myself, "Is the discount set reasonable?" I need to figure out if it makes sense with what I know about other conditions in that geographic region. I need to know what's changed from the last time that I looked at this network, because we keep all that in the database. And then I need to look at what has to happen here for me to be right. How far off could I be in terms of guessing what the actual effect of this network would be? I just back into a scenario in which we give them X as a discount for using this network at this deductible and figure out what that implies in terms of leveraging, utilization, etc.

The final thing is following up. You typically evaluate them once a year, look for contract changes, year-to-year data consistency, name changes, mergers and acquisitions, and that kind of thing. There's a lot of activity in name changes and it's hard to figure out who's who. Service area changes to the extent that they've

added or deleted significant providers must be examined, and contact changes can be significant. In one case we had one person that had a network that gave us absolutely everything on a CD. The next year they were gone and we couldn't get anything, so that could be a material thing as well.

**MR. GREGORY SULLIVAN:** What's the range of values that you put on the networks? Is that plus or minus ten percent from where you normally stand or more than that?

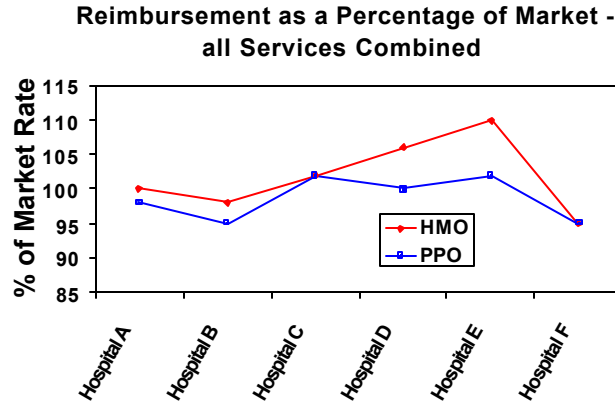
**MR. GASPAR:** It would be more than that. There's a big difference in my perspective, in networks. The more significant thing is that within a given network and within a given area you could have a material difference in what their arrangements are. That's a difficult decision. I've seen some in which somebody had the process before I came along. So I looked at what they were doing and in some of them they would have a statewide discount set. Based on what I've seen that might not be a good idea.

**MR. TOM DORN:** I'm with Hartford Life as well. Have you been doing this for a long time and have you done experience studies that validate some or all of the discounts?

**MR. GASPAR:** I personally have been doing it for about six years, and as management changes they try to validate estimates. When you're trying to get more money and more resources they ask why. I think it matters, and in order to demonstrate that you have to generate some experience studies and that sort of thing. So, yes we have, and we've been able to demonstrate that evaluating the network appropriately is an important thing. From our perspective, there are some network environments, especially for the stop-loss carrier that are much better to do business in. So to get that business, I have to differentiate my price.

Chart 1

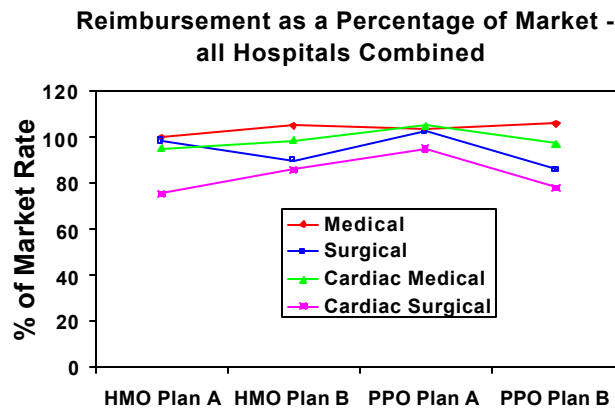
### Market Based Benchmark *Example* - Results



6/25/02

Chart 2

### Market Based Benchmark *Example* - Results

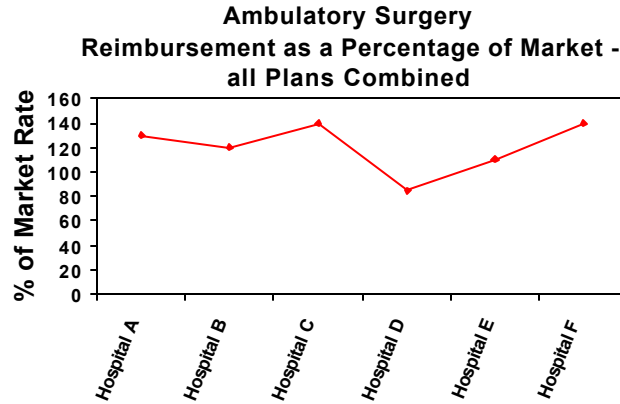


6/25/02



Chart 3

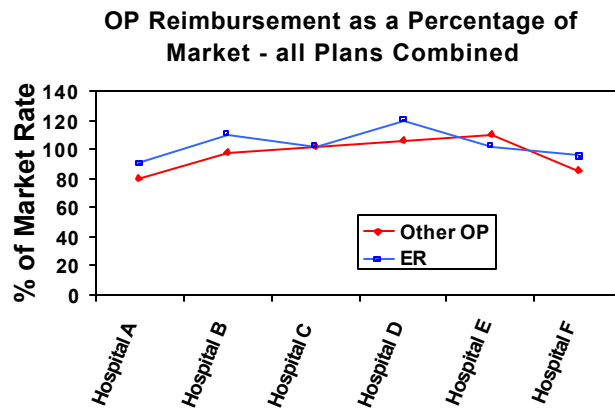
### Market Based Benchmark *Example* - Results



6/25/02

Chart 4

### Market Based Benchmark *Example* - Results



6/25/02