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Session 40PD

Mitigating Future Health Care Cost Trends

Track: Health

Moderator: Lisa F. Tourville

Panelists: Sunit R. Patel
Jeff Levin-Scherz†
Scott E. Guillemette

Summary: This session provides a short overview of methods used to identify areas where future trends can be mitigated using benchmarking and research capabilities. The panelists discuss opportunities to improve medical cost trend through underwriting, healthcare benefit designs, contracting and network management, claims operations and medical management. Specific case studies are to be presented.

MS. LISA F. TOURVILLE: The gentlemen that I have with me are here to talk about mitigating health care cost trends and what we can do to actually control them in the future. Dr. Jeff Levin-Scherz is a chief medical officer at Partners Community Health Care Incorporated, the network arm of Partners Health Care which is a large integrated delivery system in the Boston area. Jeff is going to be talking about mitigation through medical management.

We've also got Sunit Patel who has an employer's perspective and Scott Guillemette who'll be talking about mitigation from a health plan perspective.

You know some of the key issues in managing the medical cost trends when you look at a lot of the historical trend drivers and try to understand what's driving

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† Dr. Levin-Scherz, not a member of the sponsoring organizations, is Chief Medical Officer at Partners Community Healthcare Incorporated in Boston, MA.

Note: The chart(s) referred to in the text can be downloaded at:
http://handouts.soa.org/conted/cearchive/neworleans-june05/040_bk.pdf.

them, what you can do about them. There are a lot of different areas where you can actually go in and manipulate them and mitigate them. One of them is cross sectional. It covers many different functional areas across the company. They can be handled through benefit plan design and can help manage utilization and cost. Proactive underwriting can make the difference between respectable profits and devastating losses. Contacting initiatives and network management can lower medical trends. Medical management must be carefully focused and critically evaluated. That's one of the most important pieces. Operations must be able to support benefit design contracting and medical management initiatives. It doesn't matter how good your ideas are if you can't implement them. Trend management initiative needs constant attention to and revisions.

Dr. Jeff Levin-Scherz is chief medical officer at Partners Security Health Care which practices managed care contracts on behalf of integrated and affiliated hospitals, 1,100 primary care doctors and 4,500 specialists on a range of programs to further clinical integration among partner constituencies. He led the medical cost trend management initiative at Redman Anders. Prior doing Partners Community Health Care, Dr. Levin-Scherz was a clinical instructor at Harvard Medical School and an assistant clinical professor of public health and family medicine at Tuck University School of Medicine. He's an adjunct lecturer at the Hartford School of Public Health and is an associate medical director of Tuck Health Care Institute. He's board certified in internal medicine and a Fellow of the American College of Physicians. He completed his MBA at Columbia University.

DR. JEFFREY LEVIN-SCHERZ: I collect titles. I collect degrees. I'm going to talk about how you can mitigate medical trends through medical management. I'll start out talking about a big thing that actuaries taught me, which is how costs are distributed. I will talk about the different types of medical programs there are and what kind of results we see from them. I'll do a little bit of talking about cost and quality simply because a lot of people have need to stand it if we could only improve quality cost would just sort of sink through the floor. I'll give you my perspective on that. I will also talk a little bit about how provider IT infrastructure might actually be the solution. Although I'll also show you that some of the studies that have been done actually in my neck of the woods are a little bit on the misleading side. I'm sure that's no surprise.

Which health plan members, which people in a population cost a lot of money? It's often hard to tell who they will be. But once you know who they are, it's a very small portion of the population that represents most of all the cost. In a commercial population about half a percent of membership represents 20 percent of cost. When you get up to 3 percent of membership you're pretty much taking care of about half of all the medical costs. Medical trend energy should probably be aimed at the top 1 or 2 percent of the population. If you aim medical trend initiatives at the bigger population, that 97 percent of people who only represent 50 percent of the cost, you can't actually do very much. It would just be cost prohibitive.

The other thing about people who are not expensive is that if they don't tend to have expenses, you can prevent risk. The data I will be using is from the health plan that I worked at for about 6½ years. For the top 1 percent, the total costs are about \$2600. That's the inpatient hospital cost. Most medical management efforts that are very successful right now really are aiming to prevent hospitalizations and prevent hospital costs. If you go to the top 1 percent there's a bar there that you can decrease. When you get up to the top 5 percent the bar of total hospital spends on per member per month (PMPM) basis that's getting very small. The opportunity to save money by preventing hospitalization, frankly this claim often doesn't exist. We don't have a really good way of preventing obstetrics. Not in terms of medical management.

We've looked at data backwards and forwards at Partners. We're involved in a bunch of paper performance contracts. We actually, unlike maybe some provider organizations, do deep down care about medical costs and utilization largely because we have about \$100 million a year at risk, and if we don't need a series of targets we might actually not get paid some of that or even all of that. It sort of concentrates our attention. We spend a bunch of time looking through our gate on commercial patients. There are six diseases; asthma, coronary disease, congestive heart failure, COPD, diabetes and chronic kidney disease, which basically represents somewhere in the order of 9 percent of the population. But people who have these diseases represent about 50 percent of all hospitalization. We move toward targets where we're trying to prevent hospital admissions. It makes sense to us to aim programs at people who have these diseases. All these admissions aren't for these six diseases. Some of them are for other things. But if you're managing somebody with asthma and doing a great job of it, doing that should actually lower the chance they're hospitalized for whatever, not just for asthma. It's important to look at total hospitalizations in a population as opposed to hospitalizations that are just for specific diagnosis.

We looked at our half a million patients who are in managed care contracts, that are in paid for performance contracts, and one in ten of the people who have these diseases will be hospitalized each year. Again, it's almost half of all the hospitalizations in the under 65 population. We're optimistic that focusing this way will actually make a big difference for us.

It's not about managing millions of patients, it's about figuring out who has indications that they are likely to have medical expenses and just managing those.

Next, I have a menu of medical management interventions that I think could be considered. I'll talk about each one of these separately. They work on inpatients once they are there already. They're trying to prevent people from becoming inpatients, which is generally complex case management. Take a group of people who you think are very highly likely to be admitted and do a lot of things on the out patient side. There's disease management youth protocol to better manage people who have specific diseases. There are health promotions. Why don't we just make

people live healthier so they don't actually sort of tumble down and land in the hospital. There are educating providers and patients. I'll talk a little bit about what works and what doesn't about each of those. There's back to the 1980s managed care, which there's a lot of right now, which is prior authorization. The doctor has got to call somebody to get permission to do something and talk about the impact of that. There is physician profiling. Medical care is a place where there's enormous variation. Clearly if you could eliminate from your network a few doctors who are indiscreet in their utilization that might make a big difference. If you could charge people more to go to those doctors that might make a big difference but the market hasn't absolutely gone there yet. There's potential to eliminate some of the worst performers maybe that would help.

First, let's discuss the inpatient side. Many health plans are still paying percent of charges or per diems, and if they are they're getting people out of the hospital quicker. However, many other health plans have moved to decision resources group (DRGs), which essentially puts hospitals at risk for length of stay. There is something fundamentally nice and aligned about hospitals being at risk for length of stay. They're right there. They can manage lower length of stay and if they're getting paid a flat rate for each DRG they're likely to do it. It's much easier for me to imagine somebody appropriately inventive doing something then to set up police action to try to make it happen.

Again in a DRG environment for health plans this doesn't make much sense. For providers like ours it makes a reasonable amount of sense because our hospitals are generally paid DRGs. Where they're not, we tend to have contracts, which have targets to lower inpatient stay. We actually do this. We find in our markets that most health plans have abandoned this. We also see a huge move toward hospitals. Hospitals are usually internal medicine trained doctors, sometimes with a specialty who simply spend their professional lives in the hospital managing people during the few episodes of hospitalization. Our evidence from Boston seems to suggest that hospitals alone manage to reduce length of stay by close to a day in most environments. So again, once length of stay is down a whole lot, and if you look at our length of stays in general compared to for instance, European length of stay, ours are lower. The opportunities here are substantially lower then they were before. Again, the business case for most health plans has actually prevented admissions rather than getting people out of the hospital a little bit quicker.

Now I want to talk about ways of preventing people from getting into the hospital. The general buzz and the hot topic is disease management. There is a continuing and maybe even an increasing effort to show that disease management doesn't just make people care better, but actually makes care cost less. I have an example of a huge diabetes management program. It was multi-faceted. It rings from just sending a couple of glossy brochures to people. Then we actually had weekly or even more frequent phone calls to the diabetics that were at a much higher risk. I compared the intervention group compared to the non-intervention group. In different Cigna markets, they deployed the intervention at different times and that's

how they created a base line. With intervention, they used hemoglobin A1 testing, use of ace inhibitors, which can prevent kidney failure and diabetic, dilated rectal exams, checking urine to see whether people are losing protein, which is an indication their kidneys are at risk. They checked that their lipids are well treated and that they were not smoking.

Their intervention group actually did better then their base line group in all instances. If you review all the disease management literature there's no question, people who are into these management programs actually fair better. In some instances, they fair better simply because of selection bias.

I worked at a health plan where we had a program to try to prevent neo-natal ICU stays. It was a high risk pregnancy program. When we did the first analysis of the program, we found that it was saving like \$2 million. Part of why it was saving \$2 million is we had a hard time finding a control group and you sort of guess what we did. The control group we chose was the refuse nicks, the people who refuse to join. So we were surprised at how great the savings were of this program. It actually boggled our mind. But then as we thought about it a little bit more it was clear that people who were using cocaine didn't really want a nurse to be calling them to try to flex their benefits a little bit and be sure that they didn't have a premature delivery.

Even with that disease, management programs really improve care. I don't think there's any question about that. The question really is do they save a whole lot of money? Damien Krause had an article in the April edition of Disease Management doing a medi-analysis, looking for studies that met a set of reasonably rigid criteria, although maybe not quite rigid enough. He found 67 of them with 30,000 subjects, and restricted himself to heart disease, asthma and diabetes. What he found was that there was a weak to moderate evidence that these programs economically were effective or that they really were lower cost. What was striking is that most of the studies were very short term. Almost half of the studies were simple pre-post industry sponsor studies, which generally are not especially reliable. You can do the medi-analysis and say, "Gosh, there's a weak to a moderate economic impact." But then if you look a little bit harder you have to still treat this with a substantial amount of skepticism.

Disease management companies are actually risking tens of millions of dollars of their money on a reasonably strict Medicare randomized control trial. If CMS doesn't save 5 percent, they'll actually have to pay back their management fees. They might actually spend millions of dollars on programs and actually owe it all back at the end of three years. Nonetheless, companies are sort of bellying up and going for it. So it's conceivable that in three years or in five years when all the analysis is done, we'll actually be able to well show that these were. A recent mathematic preliminary study of the Medicare demo project suggests that when you charge these management fees, they're most likely to be effective. Again that makes sense. The most ill enrollees are most likely to have medical costs that could

otherwise be prevented.

I looked at a study that was published in December 2004 in the American Journal of Managed Care. They were looking at Medicaid beneficiaries and they looked at an intervention group and a controlled group. They discovered the intervention group and their idea was they would health monitor these management programs and they wouldn't do it for the control group. This way they'll find a factor for what management should be. Then they'll see whether their program participant actually regresses further than what the normal regression would be. It was not a terrible design. It was actually probably pretty good. The regression of means for the control group of 30% is pretty high. So that is a problem of many asthma disease management program assessments that were done earlier as they didn't try to control for this regression of means. The problem they got into is, as always, who is the control group? It turned out their control group was four years older. Three percent of them had such high non-adman claims that they were excluded. Nobody was excluded from the intervention group. The way they decided who was going to be the control group was the researchers were unable to reach at the home phone number that was provided. So that right away means the control group. In Medicaid you know there's a kind of group, there's the moms and kids group, and then there are people who have major disabilities who often have major mental illness. It seems likely given these substantial differences to me that the control group was actually much more heavily loaded with asthmatics who happened to fall into this table group. You just can't compare those. You know they tend to be much older. They tend to have some common and mental illness. So does asthma disease management really have an intervention effect at 18.4 percent? It could, but I'm not convinced yet.

Where are the savings and where are the costs, and who actually gets the benefit? The program cost is on the cost side and the savings are largely inpatient and professional. There's a little bit of extra cost on the pharmacy side. This is one reason why, coming from the provider side, I understand why disease management programs, if they're going to happen, are largely going to happen at the health claim side. For a provider organization to provide these all the savings are actually top line losses for providers and all the costs are sort of bottom line losses for the provider. It's pretty hard to create a business gauge. Although there's a lot of enthusiasm about disease management programs, there is still substantial skepticism too.

I'm going to move on from my disease management to help promotion. Again the idea is just take a group of people who start out a little bit unhealthy and get them to run on treadmills and eat Egg Beaters instead of omelets with ham and maybe everything will be all better. The more risk factors an individual person has, the more likely they're going to have excess cost. So if they have only zero to two risk factors, and I'll tell you the risk factors in a moment, their cost during this period of time tended to be \$2,000. If they weren't willing to participate at all, they wouldn't fill out the health risk assessment and they had somewhat higher cost. Again I'm

not sure that that's because the health risk assessments alone save money. But we can talk about that in a moment.

As their risk went up, there was almost a dose response curve up to three to four and then after you got to four things started to plateau. The problem with this is that some of the stated risks aren't really risks you could remedy. They're actually illness. We're sort of mixing things up. I have a hard time saying that an existing medical problem is something that I could actually erase if only somebody got on a treadmill. That's not 100% true. You could take somebody who is a diabetic and actually get them off medicine, but they'd still be a diabetic. Their risk would still be substantially higher than somebody that wasn't a diabetic in the first place. That's really one of my take away ideas from all of this. Sick people do cost more to take care of and healthy people do cost less to take care of. That's why there's really a lot of work for actuaries to do for health plans. At a minimum, existing medical problems in illness days of greater than five really aren't things that could necessarily be helped by health promotion activity. You might argue that physical activity of less than once a week might also be due to illness as opposed to be a cause of illness. It would be sort of hard to tell and you'd need to do a secondary study.

A study looked at a nine year period for one employer who fills out four or more health risk assessments actually had an annual decrease in expense of 1 percent. People who filled out less than four health risk assessments increase in cost of about 8 percent. Now imagine that. Imagine the cost going down. Imagine the bad news and for some people the costs go up. The people who didn't fill out the health risk assessment were actually a small group over this nine year period. I have to ask myself, does just filling out a health risk assessment make people less costly?

I'm the chief medical officer of a network with almost 6,000 doctors. I wish that there was really good evidence that educating providers was really effective. In fact, maybe I shouldn't be working. But there is a reasonable amount of literature that shows that educating doctors alone doesn't change their behavior. If you want to give them education, it's got to be really aimed at what they actually do. The more that it actually involves cases the more likely it is that they would remember it. It still doesn't have an enormous impact on physician behavior. We struggle with this because one of our missions is to better educate our physicians. We also want them to all use evidence based medicine. Here we are not exactly using evidence based management.

There is some evidence that providing patients with self care information can make some difference. That's not necessarily strictly making a 24 hour nurse line available, although that might help. Men who were faced with the question of should they have a proctectomy for enlarged prostate were given self care information and tools. They were also given a questionnaire and shown the score and how they sort of fit into the general population. Fewer of those people decided to end up getting the procedure than people who didn't get this sort of education. A

lot of this work is being done by the Foundation for Informed Decision Making. It actually originally arose out of work at Mass General. We're actually trying to figure out how to better incorporate this into the care we give our patients. I think this is promising. Again there's not a great economic study yet. I'm sure there will be in the end.

For prior authorization, the doctor has to call the 800 number. You know it really works. –The big thing in prior authorization right now is high process imaging costs which tend to be going up close to 20 percent a year. That's CT, MR and head scans and there are a few vendors out there doing this. MIA is the biggest and probably the most successful. They recently got a foot hold in our market. Pharmacy prior authorization programs absolutely work. I've seen evidence that health plans that put prior authorization in place actually were able to decrease utilization by as much as 80% compared to health plans that didn't.

Prior authorization though has some big bumps. One of them is that patients and providers both hate it. The other is that you can't really prevent medically justifiable things. You can only prevent medically unjustifiable things. Here's a quote for you from a health plan medical director, "Any doctor who's not smart enough to fool my prior authorization program shouldn't be caring for my patients." It might work on the margins, but there's a limit. If you figure that 30 percent of something was medically not necessary, you couldn't have a program that would prevent 30 percent of it. You'd only be able to prevent some portion of that 30 percent.

Somebody walks on a treadmill, a doctor watches and about a quarter of them are done with nuclear imaging. A regular stress test costs about \$150, and it costs about \$500 to do an echo with the regular stress test, and it cost about a \$1,000 to do a nuclear scan with the stress test. For one of our groups, which has the capability of nuclear cardiology on its own, the doctor is making more money if they do nuclear imaging. They actually do a vast majority of its test. I think it's like 56 percent or something of this test with imaging. We're working to try to figure out what to do about that because that puts some of our paper performance contract at risk. Unfortunately, the real problem is that there's way too much markup on these tests. If they were paid at something a little bit over their resource cost you wouldn't be seeing this.

When you try to rank cost and quality, what you'd like to see is a positive slope line, as the cost goes up the quality goes up. It's good I'm not a Medicare patient because the APPC around here is the highest around, yet the quality rating seems to be 51st. North Dakota, Maine, New Hampshire, Vermont, Minnesota and Wisconsin, a bunch of sort of generally rural New England and Midwest northern states, are the places where they excel in mammography and they're not the places where Medicare spends the most money. Of course, if you have the most specialists you also spend the most money. But does that equate with quality? No. There is a slope in the line in the opposite direction. If you're in a place where medical care

cost less, it might actually be that the quality ranking would actually be better.

I have a short take on cost and quality. Everybody thinks that there are all these places where you could decrease the cost and increase the quality. You could decrease the cost and increase the quality. We should all jump right on board. The problem is in most instances you could increase the cost a little, or you could increase the cost a lot, and get a little tiny bit of incremental quality. Is that worth it? You could decrease the cost a lot and you could suffer a small decrease in quality that most people wouldn't think mattered. Are we willing to accept that? There are real public policy issues. "If we could only increase the quality, we would take care of the cost problems." I think they are sort of missing it.

I have one more topic and that is to just point out that you know a lot of industries better use of IT has made an enormous difference in the cost of doing business. A lot of the data on how electronic medical records are lowering the cost of care actually comes out of Partners. We have some contracts where we have to get 70% of our community primary care doctors up and running on EMRs in the next two years. So we're pretty invested in this. We have a study from our neighborhood two years ago showing that each doctor should save about \$86,000. But I just want you to be a little cautious about this \$86,000 a year per doctor. Some of that isn't exactly savings. For instance, if you look at billing error decrease or chart capture improvement that actually means the doctor makes more money. But from an employer or a health plan perspective, that's sort of a big of a net negative. If you want to just aggregate that \$86,000, what you get is that it's costing providers about \$42,000. Saving providers are getting the doctors an extra income of about \$43,000. It's really about a watch we're provided. Then there is saving for health plans. What we're trying to do in our contract is to get them to acknowledge this and actually give us incremental payment to the extent we're able to get people on electronic medical record knowing that they're going to have fewer duplicates and fewer problems. I can't say we have universal success with that in contracting, but that is our general approach. There is money to be saved. It's not all to the doctors and that's part of why it's been hard to get doctors to do this.

It's really ironic that I go to a Thai restaurant in a strip mall and they're using computerized waiter entry, but if you see how many hospitals have computerize physician order entry it's not as many as you'd like. Most of ours is.

Better electronic health care information exchange could save the system \$77.8 billion. Again, you might want to discount that a little bit..

MS. TOURVILLE: Sunit Patel is an actuary with health and welfare consulting group with Fidelity Employer Services Company. He assists clients on the design and administration and financing of employee benefit programs. He has significant experience with rate negotiations on behalf of employers and health plans which include reserve calculations, benefit pricing, expert witness analysis performance projections, due diligence on mergers, and acquisition and risk management.

MR. SUNIT R. PATEL: We heard Jeff talk about the provider perspective and how important it is for them to manage and mitigate future health care cost trends. Scott is going to be talking from the health plan perspective. I'm going to be presenting from the employer perspective.

I'd like to argue that the employers actually have the most at risk, in terms of being able to manage health care costs of the future. I think that recent history bears that out. If you look at health care cost trends in 2001, they've been increasing in the double digit rates all the while the health plan has been able to meet record setting profit targets. The employers on the other hand for a number of reasons aren't able to pass on the costs. For example, a lot of them compete with companies that are located outside of the country and have lower cost structures at least as it relates to health care. The larger employers certainly often drive the change. I think when we talk about employers it's important to know and recognize that the employers are really price takers and product takers. They really don't have as much flexibility or resources unlike the largest employers who often drive and initiate change either through working in Washington or with the health plans who's attention they have and also sometimes through the provider community.

We've taken a look at what employers are facing. We've got the 2004 call for one of our companies that we work with where the average annual cost on the medical side is \$5600. We figure what the costs are for other benefits, and the average salary. Just by giving the 2004 numbers, there's been a lot of pressure on companies. If we just trend that out at fairly reasonable rates of 5 percent or 8 percent, out into the future health care really becomes the dominant benefit that's being offered. It is certainly increasing significantly in relation to the salary. What's been happening? When you look at the union negotiations, that's often insightful because they explicitly have to make trade offs. What we've noticed is that with union negotiations they are often willing to give up the salary increases. So instead of 4 percent they're willing to agree to 2 percent in order for a trade off to keep their current medical plan. That has a lot of implications for the employer. For one, there's a fairness issue of the employer or the employee rather who has a family getting more coverage and hence, getting more payment if you will even though it is indirect compensation. The other one is it's hard to reward performers when the rates are only 2 percent, and that rate pool is being sacrificed in part because of high medical cost trends.

Health care affects not only the active health care cost, but there's also retiree component. It also can impact workforce management in general. There are a number of studies that indicate that individuals who are not offered retiree health care are much more likely to not retire early even though they would want to. For the employer perspective, it's more expensive for them to employ someone for example, who's age 60 versus age 35. For example, we've quantified for an individual specific to a certain company what the cost difference is and it came out to \$30,000 annually. One of the clearest examples of this is colleges were professors don't want to retire even after they turn 65, they certainly don't want to

retire at 60 and there's no way because of their position to encourage them. A lot of colleges have decided to offer retiree medical as an example, even though it's an expensive coverage, because it's easier for them to have someone retire. A professor who's earning a \$120,000 could be replaced by someone who's fresh out of the PhD program who'd be willing to come in at \$60,000. There's this whole issue of work force management and what's going to happen with the baby boomers, which is another reason why employers are very interested in managing healthcare costs.

We know that we're talking about how important it is to mitigate health care cost trends from a number of different perspectives. But the one that none of us is hitting explicitly is from the individual perspective. I wanted to just share with you some estimates that we produced around a couple who's 65 years old and how much they would need in savings if they wanted to retire. Again, this is a couple who's retiring at age 65 and they would have Medicare coverage Part D of course, comes on board in 2006, even with that coverage there's obviously cost share within Medicare and other gap. There's also the Medicare Part D and Part D premium as well as benefits not covered by Medicare. So the present value of the savings they would need on an after taxed basis is \$190,000.

Now at Fidelity, as a lot of you probably know, we're an asset management company first and foremost. We like to tell our clients that your employees think that they have been using their 401K to go on vacation or for some fancy trips or a nice house. But rather they should view it as of retiree health care account, which is fairly depressing news to them. The good news though is that one way or another, we strongly believe that health care cost trends have to come down.

Health care percentages of the gross domestic product (GDP) in 2004 were about 15 percent or so. We've projected what would happen if health care costs keep increasing at a certain rate, and we use as a benchmark the entire economy. If health care cost trend at 3 percent higher or grow 3 percent faster than the general economy, by 2030 we're going to spend over a third of our GDP on medical services. All of the experts agree that as a country we really can't afford to be more than 30 percent at any time. So in recent years when we've seen trends at 12 percent, 13 percent, 14 percent and 15 percent and the GDP growing at 2 percent, 3 percent or 4 percent, we believe that that's not in the future, because there are obviously other services that we need to invest in.

This also brings up the global issue of an owner to compete with other companies. With other countries it's going to be very important to bring our health care cost trends down.

I wanted to present a menu of what employers can do and what they think about when they're managing health care cost. I've broken it down into short-term and long-term and they certainly overlap. This is just sort of a neat way to look at it. But certainly it's not exclusive in terms of where it belongs. There are four

categories and I'm not going to go through each one. I'm just going to highlight what we're seeing in the market place right now.

With respect to vendor management, a lot of employers are consolidating their purchasing. A lot of the national employers who have employees spread out over the country they're reducing the number of plans they offer, etcetera. That's great but by and large there are some drawbacks. They are often not getting the network strength or the discounts they could have otherwise. There is a lot of interest in audit too. Not just claim audit, but eligibility audit. You've probably seen that in the newspapers. Some of the auto companies who save tens of millions of dollars by doing those. It's an example of how some of these changes do occur at the larger companies and then filter down to the mid-size.

There are performance guarantees, which relates a bit to what Jeff was talking about. The employers are putting pressures on the health plans. I think the health plans in turn are pressuring the providers to guarantee some of their performance.

The greatest activity is the spousal surcharge. Again, these are not necessarily ways to mitigate the underlying trend. I think that's an important distinction. From an employer perspective, they are often looking at their costs and not the total cost. They certainly are of the hostile mind as why should we be subsidizing someone's spouse who may or may not be employed somewhere else. Once a few employers start putting in a spousal surcharge, the other employers are almost forced because they don't want to be an employer of last resort. We're definitely seeing an increase in that.

In terms of supply management, tiered networks are certainly gaining a lot of attention in certain parts of the country. In other parts of the country it just doesn't make a lot of sense. With respect to demand management, I would say that's the area of focus primarily where employers think that there's the greatest opportunity to mitigate cost in the future. I'd like to think of managed care and HMOs in the mid 1990s as really affecting supply of trying to get into the right type of contracts with providers, which are obviously DRGs, in terms of discount. You've all I'm sure heard many, many times that we really need to start engaging employees in order to drive costs down. I'll certainly get into that.

Incentives have become very popular among employers as well as health risk assessments, predictive modeling, etcetera. I don't believe that these are all equally as effective. I think there's a lot of debate out there in terms of the potential impact. But again this is the menu that employers are looking at.

I think the underlying trend that everyone agrees with is that needs to be reversed. The data is not very recent. We thought this was a good source because it goes back all the way to the 1960s. It just shows that employees are paying less and less as a percentage of health care cost. Certainly they are less engaged because of that.

If you look at where employers are focusing attention, it is in chronic conditions. You know they've always recognized as Jeff pointed out again, that a lot of the money is in the chronic conditions. A lot of money is being spent on chronic conditions as well as on the catastrophic. I think employers are looking at it a bit differently than providers or health plans. They're able to because, at least for many companies, their employees are longer term employees and they have a long relationship with them. The health plans, at least in the past I've heard, don't have the same incentives, because an individual can move from one health plan to another. If you invest in making that person healthier, you might not get the same return on investment. Also employers to the expense that employees are healthier, they have the additional benefit of improved productivity and also savings perhaps on the short term disability and LTD side also.

They're recognizing that while it's important to address the chronic or the catastrophic that they probably want to spend some amount of effort on this low bucket also. In terms of wellness programs and other initiatives so as to prevent or at least reduce the likelihood of those people moving from the low to the chronic bucket.

We've also looked at the allowed claims of individuals and then what the employee spends. We define the spend as what comes out from the employees perspective. There's the contribution, which is what you required out of your monthly paycheck. There's cost sharing of point of service and then a credit for the health risk appraisal (HRA) or the health status adjusters (HAS). They are design that employers are trying to incent the right behavior. I think employers are recognizing that there are these different populations and that they also need to react and encourage certain types of behavior. They're designing these plans so that there is an incentive for people to go in. If you have claim levels that are below a \$1,000 or so, yes, it will come out better. But then if you do move into a higher category, there will be more cost sharing. It's interesting because while they certainly try to incent the right behavior what experience is showing is there's obviously a lot of adverse selection going on within the plan. The average experience, for example, for the health 2500, is \$35 per member per month. So at the end of the day the employer, unless they can get a better cross-section of employees into that plan, would actually be better shutting that plan down and moving those folks to a richer plan. Only their healthier people are taking that plan. Again it all comes down to increasing employee accountability. That's really the focus in terms of what the employers are trying to push.

I just wanted to touch a bit on HSAs as a way to mitigate health care cost trend. The reason is because there is so much interest within the marketplace from the employers at least. There are quite a number of them that really believe that this is the silver bullet and that it will certainly help them manage health care costs. While I certainly recognize the benefits of these plans, I do think that there are certain limits. One you're offering first dollar coverage to people. There's the adverse selection issue. Then of course, there's the out of pocket limit, which all of these

plans have. Most of the costs are going to occur in excess of the out of pocket, so you're really not able to impact all of your costs equally.

What we try to emphasize to employers is to look at the core of the current cost in terms of the employer contribution, employer cost sharing and the employee contribution. But then by introducing an HSA there is also going to be a layer of costs that you add. The hope is that you've increased cost sharing and that the use of services is going to go down. I think that's a fundamentally sound assumption if you look at pharmacy data, which is very robust. You certainly see that if you increase co-payments, you'll also see a decrease in how often people use those services.

I just wanted to share with you what employers are actually thinking about. It's often different than what we here might think about in terms of what could work in terms of mitigating cost. A fairly large sample size was asked what programs do you think are going to be most effective in terms of managing health care costs? It turns out that they have the most confidence in disease management plans, which I would argue which is perhaps the most controversial in my perspective. I think there's a lot of debate in terms of the exact value especially when you consider the cost. They are least sure about higher employee cost sharing, which is surprising to me. To me there's a direct relationship between if the employees pay more, the employers have to pay less. They're very confident about these consumer driven plans, which again contradict with higher employee cost sharing because that's an essential element of the consumer driven plan. There's a tighter managed care network, which again are gaining more and more acceptance. Again, I think it's just important to know that there's no consensus in terms of what employers think will help mitigate future health care cost trends, but they do think that it's important to take a multifaceted approach. There is certainly a lot of controversy in what they believe will work and won't work.

At the end of the day, the employers they do feel helpless even though there are these options that they have. A number of the largest ones, the Fortune Five, Fortune Ten are talking to us about how do we move to a defined contribution approach? How do we get there not in the near future perhaps, but five years down the road or ten years down the road? What steps can we take so that we really can give our employees a lump sum of money or make it very similar to a defined contribution model? If you envision the future, at least in terms of where they'd like to get to, it's really where the company would provide access to some choice plan designs. Certainly a defined contribution (DC) structure, account based structures and the HSAs are the first step, but I don't think they are necessarily ideal. The education, information technology and tools to support the employees need to be available. But they are really stressing that the employees really need to take again accountability, become informed, take a longer term approach about their cost or risk, manage their chronic conditions, et cetera. So that's certainly a model employers are moving toward.

If you look at everything we talked about I think, depending on the circumstance, it all has some potential to help mitigate cost trends. Some of them are one time impact, so it might reduce your cost or your trend this year, but then your trend is going to pick up in the future. Others you could argue are going to have a longer term impact, but at the end of the day I think that if you want to work within the current system I think the one essential piece that's missing is transparency. If you're going to give a lot of responsibility to your employees, I think as much effort as there is out there and I know that there's a number of tools that are available, I think there's a long way to go. If transparency improves, I think they can truly help mitigate health care cost trends. A good example of that is laser surgery, which is usually paid out of pocket. There the technology has certainly improved over time, and yet the costs have gone down.

I personally think in terms of how costs are going to come down because again, I really believe that our health care cost trends have to come down. I think there's going to be alternative models and there's already an emergence of some of these models. At the high end you have the concierge service where you have physicians demanding a certain amount of money in order for them just to be your PCP typically. One of the colleagues that work with has a physician who she's been seeing for 15 years. She got a note saying that her and her family could elect concierge service for \$1800 a year and in return she would get 24 by 7 access, and her appointments would start on time. She said, "Well, I'm not sure if I want to pay it. We're fairly healthy, but if I don't then I'm going to be a second class citizen." It's certainly a difficult position for someone like her. But that is one high level where some physicians, especially those that are well recognized, have adopted a concierge model.

At the other end is our Minute Clinic, which aren't necessarily low end. It is actually a company in Minneapolis. I don't have too much exposure with them but I think it's a really neat idea. From what I understand, they set up shop in target's office and it's not a physician, but a PA or a nurse, it's a way to deliver care at a lower cost. They have a menu of services and you can only go in for those.

In conclusion I would say that what's going to happen without promising on the merits of it one way or another. I really think that healthcare is going to become income and asset sensitive. Within most companies people have access to the same amount of coverage. Whether you're at the bottom of the ladder, middle management or senior management, if you have a \$1,000 out of pocket almost anyone can afford to go to any doctor or to any provider. I certainly think that if you have more of the cost sharing and as the plans change I think you're certainly going to see where everyone doesn't get access to the same type of service.

MS. TOURVILLE: Scott Guillemette is a principal with Redman and Anders. He works extensively with HMOs and managed health care organizations on the strategic pricing ratings and underwriting of their insurance product. Scott's helped these organizations identify problem areas within their delivery system by

performing financial and clinical experience analysis. Upon identification of problem areas, he then works closely with the organization to guide them in the improvements of their operations.

MR. SCOTT E. GUILLEMETTE: One thing I think that you'll note is that much of what I'm going to present is fairly rudimentary. I don't think there's too much that's too leading edge in what I'm going to speak about. I think one of the key things that I've come to conclude over my years in the consulting field is that what we do we don't do well enough. That's what we're going to talk about largely, ways that we can actually improve on doing the simple things.

I tend to look at trend in a couple of different ways. The first way is the retrospective review, which is what most of us tend to. Then the prospective review of ways we can manage trend. When I'm looking at it from a retrospective perspective, I think of six simple steps. I just kind of want to reiterate we need to do these very well. Making sure your data is accurate and benchmarking. These are six simple tasks to identifying nominal trends in your experience. You may need to purchase or acquire in some ways some benchmark data to help you reference your data. But in large part what you're doing is going through a process of checking and rechecking your data.

When we're trying to pull all this information together in a large part, most health plans have multiple lines of business, multiple products. Health lines are constantly changing. The large nationals are constantly acquiring. They're bringing on new companies. Do we have all of the information? First of all, you ask yourself do I have all the data before we can even start to identify anomalies. You're trying to pull it all into one platform. Make sure that you have all of this information. Make sure you can check it against some financials to make sure that you do in fact have it all. Then you need to understand a little bit about the temporal components of the data. You know when was this data collected? Is it paid data? Is it concurrent in this period? When was this stuff cut? You need to really understand that in order to be able to adjust it. As far as the anomalies, what do you want to do with your anomalies? One school of thought is to leave them in and actually rate the experience and look at it in terms of what it is for what it is. Another school would say to remove it. There are all kinds of things I think that need to be taken into account when you're actually looking at your data. What type of data are we looking at? Do we have all of our capitation experience in here? There's a fee for service. Stop-loss recoveries they are in there. Once all that information is pulled all together and you have it in the one repository augmenting it, I think more plans are starting to add information to the data. When I speak of that I say, "Risk stores is one aspect of it." Evidence based medicine in compliance percentages can be a sign for physicians in the way the data is actually put together. So you can use some of that information to help you understand what's going on within the organization.

It is very simple to summarize the meaning of full reports. Over time you start to

gain a deeper understanding of what reports you should look at. You're starting at a higher level perhaps to start. But eventually you're trying to drill down. Personally, to look at a volume of reports is of no interest to me. You pretty much need to identify the various slices of reports that you want to look at that will help reveal what's underneath this data. We're basically trying to find clues for what has happened in the data. Ideally you're trying to slice it in such a way that it doesn't what I'll say numb you to being able to identify things. I think that's sometimes what happens when you start to slice things in too much detail. That's probably a bad example in the sense of putting up detail. But to be honest depending on the detail that you do look at and the benchmarks that you slap next to, you will help identify certain things that seem out of whack.

The one important thing that I want to mention before I move on is about standardization of definitions. What does hospital inpatient mean? I think that varies from plan to plan to be honest. It may vary from company to company to take it in one from company and another and put them together, and all of a sudden you think that you've got the same comparable number. You're probably making a big mistake.

As far as benchmarking any number of the consulting firms including ours offer benchmark databases. Most offer them at an MSA level drill down with demographic adjustment. I think the key thing that you should be asking your consultant is trying to understand what those definitions are for the service categories. Making sure that what yours is is comparable to theirs. I'm sure any number of them will rerun their data according to your definitions or you can rerun your data according to theirs. It's most important that they are comparable.

If you're looking at it on a total PMPM basis you'll want to try align the reimbursement levels as best you can to the levels that are present in the market that you're looking at.

The reason I think it's good to benchmark is to introduce an external reference. A lot of times you won't understand necessarily if you're looking at your own experience from region to region. You may not see an error that is proliferating within the organization and that will not become evident until you benchmark to something else.

Now as was said throughout this presentation, everything has a distribution to it. When you're looking at your reports it's trying to identify the variance from your expected. You're going to try to do that in any one of different ways. You can try to identify it by looking at standard deviations from the mean or dollar limits from the mean or percent variances from the mean. I think there's any number of different things that you could look at to try to understand what in fact is going on. You need to understand once you do identify these particular areas what you can do about it. I mean if you understand if you identify that one particular area as in contracting, but it happens to be with the largest conglomeration of hospitals in your network

and you're going to have little leverage well, it may not do you much good to spend a lot of time trying to renegotiate your contract with them. Maybe there's another avenue to try to get at those types of savings.

When you're trying to explore these savings you're going to try to attach dollars to them. How far is your result from the benchmark or the expected? There's a deviation there you're going to try to assign some dollar value to that and then rank those categories from top to bottom as best you can. Focus on the ones that offer the greatest opportunity to you. Now as I indicated before, there's viability in each of those options that you have to understand. It may not be worth your time and energy to try to go do something about the highest dollar item. But if in fact, you can do something about it, you should do something about it. Then you start to move into the action plan phase and trying to understand what you could do to correct it or modify it.

The one thing I would like to add though is to introduce the concept of timing into all of this. How long is it going to take for you to renegotiate things or to try to modify a physician's behavior? You need to understand how often or how quickly you'll be able to realize those savings. Ideally when you do identify the areas and you start to go after them one by one, probably top from bottom is probably the best approach. Identify how much they're worth and then what it's going to take to actually do something about it. I think it's very difficult when you start to work through the mechanics and you start to figure out what you are going to do. On the surface that may mean well, it's very evident. We adjust the benefit design. There are a lot of residual affects to doing that. You have to understand too that you do in fact push in the balloon on this side something else on this side of the balloon is going to pop out. Let's call that their selection. You need to understand the residual effects of all the things that you're doing on all the parts of the organization. That's easier said than done. I don't think that we do that very well. I think we offer a suggestion in one particular area without thinking beyond the confines of that particular area. Often all these steps that I've just mentioned need to have more time spent on refining and getting better at them. Einstein said it best "science is a refinement of everyday thinking." It's really something we do need to spend more time on.

We are trying to look less in the rear view mirror and more forward looking. I'm trying to use information that may be available to you to help you run your business going forward. The retrospective review is more of a reactive type of an approach. This is much more proactive.

Using tools to leverage your intelligence is important. If you don't understand what they're doing, the inputs that go into them and the results that are popping out it is not very useful. I think it's very, very key that your actuarial judgment comes into play when using tools. As a company that sells tools we get very nervous about that. When you offer a tool, even though it creates greater efficiency, it enables the actuary to leverage things. There is that potential that they'll misuse it. Predictive

modeling is one tool I think that has tremendous opportunity for our field in the sense that it offers us the ability to stratify risk and helps us to as an organization to try to do a little bit of research on our own. Sometimes too much and that's why we maybe can't meet our deadlines on certain things. As we understand how things are correlated, we may actually learn some things about how people move. One of the most difficult things as I indicated earlier of pegging trend is that it's always changing. With each person that comes in to the plan and leaves the plan that trend is moving constantly. We're trying to basically peg it. Assign something to a fixed place when it's always moving.

Now predictive modeling I think can be used in underwriting obviously. It will help you understand if you're analyzing what types of people are coming in to the plan and what types of people are leaving based on the actions that you've done. Trying to understand what is happening. If I introduce a new benefit design, by looking at it by risk stratification assigning risk scores to each individual and I see everyone that is healthy is leaving and sick people are coming, I've done something wrong. I need to correct that as quickly as possible. First of all, I have got to understand what I did wrong to begin with. You need to use these tools to help you understand what you manipulate and what you want to change. You have to be very careful about it. Each little movement tends to disrupt that trend curve quite a bit. It makes your job a little bit more difficult.

We're talking about new technologies. We're a society that has an insatiable demand for health care and we want everything to be the finest and we want it now. New technologies are constantly being created that help us achieve those things. Help us live longer. Help us be healthier and help us not have to deviate from our eating habits and those sorts of things. I'm sorry for introducing opinion, but that's my personal thought in a lot of respect. A lot of these new tests although they do improve health, it's unknown as to what their impacts are. It pays to spend a little bit of time to think about what their impact will be on your plan and how you want to handle it. First of all, once this new technology is embraced by your organization or not embraced, how is it going to be introduced to your members? How are you going to handle it from a coverage basis? How are you going to pay for it? What do you expect to happen? Those sorts of things are important so that you include them in your rating down the stream.

I think this is the most important thing as I mentioned previously and you'll hear me say it and I'll say it again. It's extremely important to have a consistent information management platform. Without having good consistent data, standardized categories across your organization departments are going to be tripping over one another. They're going to communicate inappropriate things to the market and to the industry. It is going to communicate things that you'll have to come back and correct yourselves for. If everyone is operating from the same set of data, standardized definitions in inpatient state means this, across the organization, I think you've got a little bit more power. There's a little bit less to worry about. Very few health plans have an integrated information management

platform. That extends across the whole organization. I'm not just talking about administrative claims data, I'm talking about the billing, accounting, quality data, lab values and all of this other information that pulled in, creating information for the various areas.

The last thing I wanted to talk about is understanding where you are in the cycle. When we look at trends, it's pretty easy to peg trends when you're looking at a slope because the line going up or going down is pretty much straight. You can look in the rear view mirror and be able to peg it pretty well in the future. A lot of plans tend to miss at those inflection points. They miss at either at the bottom or at the top because all of a sudden your trend line is no longer straight. It's starting to deviate and move. The key is the deviations or the levels of deviations are shrinking I think as people are getting better and better at using some of these forward looking tools and reducing the fluctuations. There is still some cycle that exists and you still need to be aware where you are in that cycle.