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Session 52BG Health Care Cost Trends

Track: Health

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Panelists: CHARLES S. FUHRER
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Summary: Health care costs are rising, managed care continues to experience consumer backlash, enrollment providers are enjoying significant pricing power and employers are receiving large declines in health insurance rate increases. Panelists discuss the current trend environment, how the above factors affect trend, our direction and factors to consider for interpretation. Participants gain keener insights into health care cost trends and industry viewpoints.

MR. BRIAN SMALL: During our discussion please be aware of the implications of the Antitrust Disclaimer.

I'm Brian Small, your moderator, and I've assembled a distinguished panel today: Peter Reilly, who will discuss trends from Aetna's point of view, Chuck Fuhrer from the Segal Company, who will talk about estimating trends from historical claims data, and Lisa Tourville, who will tell us the factors to consider when estimating trends. I'm from Blue Cross/Blue Shield of Louisiana, and I'll be making a few comments on hospital charge trends and physician-owned facilities.

MR. PETER REILLY: I'm from Aetna, and I'm the Southwest regional actuary for our key and select accounts. I am also responsible for our select segment of businesses. While using what I know about Aetna's current activities, a caveat is that I present mostly my own perspective.

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As you know, Aetna has many actuaries, and each of us has a different opinion about trend. Some of these ideas are making their way through the organization. Trend is absolutely critical to a pricing actuary and to financial forecasting, which are two of my primary responsibilities. So trend is truly important to me, mostly because it makes for medical cost forecasting.

My perspective is that there are two different ways to approach trend analysis. The most popular way is the bottom-up view, building up medical cost trends from a budgeting method, at a detailed, line-item level. We'll build up the cost for service, utilization and a chosen geographic or segment mix, then roll it all up to get the trend projections, which we've modeled out actuarially.

The other approach is more of a top-down view. When looking at trend in aggregate, perhaps there is some information or there are some visible relationships that you can understand. Then break them down from the top to understand where a trend has been and where it's going.

It's nice to understand where a trend has been and why it was there. However, for pricing and financial forecasting purposes, where it is going is the critical question. A lot of analyses are aimed toward understanding where it went, or where it was. More importantly, we need to know where it will go and how to get there.

So my presentation is oriented toward the top-down perspective. My fundamental tenet is that trends can be broken into things that affect everybody—environmental factors—and those specific to the payer or to the insurer.

Using a top-down view, I will take you through a process where you can ask, How do we decompose or observe trends in those kinds of environmental and company-specific factors? What value does this add to anticipating a trend's destination?

The environmental factors, from this perspective, are general macroeconomic drivers. The increase in health care consumption *is* health care trends. And the higher you aggregate it up, the bigger the picture you have.

For example, the Centers for Medicare and Medicaid use the trends for national health expenditures. They're trying to capture all the dollars that were consumed in health care and how fast that's changing. So, from that bigger-picture perspective, health care costs are related to the general level of inflation in the economy. Low inflationary environments tend to lead to low medical trends, with all other things held constant. High inflationary environments, therefore, tend to lead to high medical trends. It's a fairly simple relationship.

In the late 1980s, when we had a pickup in medical and overall inflation, trends certainly responded, which they tend to do quickly. In the early 1980s, when we had high inflation, medical trends were very high. Today we have relatively low

inflation, yet we still have trends made up of a long-term average, while other factors affect it.

The next significant factor is lag, or real economic growth. This means that health care consumption tends to react to how fast the economy is growing. One such proxy is personal income. A more direct measure is Gross Domestic Product (GDP). This relationship may seem counterintuitive, but the basic thought process is that health care supply is very much related to how fast health costs grow.

Supply takes time to generate for investment purposes, and that investment tends to be related to economic activity, such as risk capital, which flows into building or researching new medical devices, or building new clinics. Also, doctors and nurses are attracted to the profession related to their economic opportunities, which takes time.

There tends to be a significant lag relationship between economic activity and health care spending growth. On a real basis this takes the influence of general inflation first. That relationship first came to my attention while working at M&R with John Cookson, but we didn't discover it. It actually came from a health economist who said, "I want a model for national health expenditures." Then he used some statistical modeling and threw out a whole bunch of lags of personal income. He found that there were significant relationships on very significant timelines.

Also significant is managed care's impact on the way health care is delivered. It seems as though there are a lot of pieces to that, but I've wrapped it up into this big picture: What is managed care doing, and how does it impact medical cost trends?

When managed care was popular and members were moving into more tightly managed plans, growth in health care spending in the U.S. became depressed. Now the backlash, along with managed care model loosening, has led to higher medical trends. Again, this is with all other factors held constant.

Finally, from a big-picture perspective, what is happening to reimbursements under government-controlled medical programs has a meaningful impact on everybody else. Cost shifts are like a balloon that is squeezed down at one end, and pops up somewhere else. There has been a very clear and defined relationship between this shift and the types of trends commercial insurers will see.

Those are the environmental factors that can drive overall medical trends, which affect everyone to some extent. They affect what the providers believe they need or want to generate in revenue. They greatly influence their budgeting and strategies for expenses, profit margins and, ultimately, revenue.

Chart 1 shows the "Lagged Personal Income vs. Milliman USA's Health Cost Index", which illustrates the key relationship I just went through, but from a

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macroperspective. It shows real personal income versus real growth in health care spending, as measured by health cost index. By "real," I mean without inflation.

Also, the personal income graph is shifted by four years, from March 1992 to March 1996. This takes out the lag impact to better show the relationship. Real health care spending tends to exceed real personal income over time. During the late 1980s and much of the 1990s, excess growth was eliminated. I refer to this as managed care impact, shifting members into either the process or a more tightly managed care product. Starting in 1998, excess growth returned.

Another way of showing this relationship is with a gap between these two lines, which means health costs are rising faster than income. That's another way of saying U.S. medical care spending, as a percentage of GDP, is growing.

This gap is the root of that growing percentage. It is an important relationship since out of all the big-picture macroeconomic factors, it is the only one with any true forecasting ability, due to a lag relationship. We know where personal income will go over the next three or four years, which may help us to predict the general direction of medical standing.

Another predictor is inflation, which is a coincident factor, so you need a good sense of what the inflationary environment will add to it. The same thing goes with what the government is doing in reimbursements, which tends to provide some lead time because it's a legislative-driven process. Lead time lets you know whether or not they're cutting back on reimbursements, so you can build that into your projections.

Finally, the other predictor is managed care. You can't necessarily predict what they're doing, but you can get a good sense from knowing the political environment, and whether or not members are moving into more totally managed products.

These are the macro-, big-picture things that can drive medical trends. On top of that, when you measure your own trends, you see what is influenced by those factors, as well as the net impact of many other things that can cause the company's specific trends to differ from what the macroeconomic perspective would have otherwise said they would be.

I'm going to run through a series of these trends to give you a taste of them. Company-specific policy management is important. It's particularly important to Aetna since we suffered some trends that were significantly higher than for their competitors during the late 1990s and the early part of this new millennium.

Public declarations to be kinder and gentler had caused significant pricing concerns and issues for Aetna. Some managed care policy changes ultimately raised our trends, which wasn't anticipated in pricing, due to timing and various issues. When it comes right down to it, this caused significant financial problems for Aetna.

On the flip side, we've been experiencing significant reductions in trends as those changes have worked their way through our managed care models and HMOs. We made changes to our precertification for authorization policies. We changed policies around referrals. We changed certain claims adjudication rules. And we certainly had an impact on our denial rates, which flow through to the bottom line of medical cost. We have also experienced trends that were higher than the industry averages, which we publicly disclosed pretty clearly in our earnings call.

Other factors that could cause a company's specific trends to differ from the market average involve contracting. Are you negotiating smaller or larger increases relative to the market? Are you using capitation? Capitation tends to delay or distort some of those bigger-picture factors and pass off risk to the providers.

Ultimately those pressures come through, either as the capitation blowing up and the entity going bankrupt, having to pass on big increases to capitated arrangements, or forcibly finding a way to overcome some of those other forces in managed care. The capitation model seems to have dissipated significantly in the industry, so the answer tends to be more toward it blowing up rather than it working.

Anyway, for a company-specific trend that has affected Aetna as well, we've had a change in the percentage of our members who are under capitation deals over time. That is essentially a change in our reimbursement methodologies that have led to trends differing from the average.

Underwriting selection can also have a very material impact on observed trend. Is there a risk change in your book of business due to loosening or tightening of underwriting standards? It is fair to say that, in the late 1990s, Aetna was voracious for new members, which were attained only through certain underwriting approaches to the marketplace, so we significantly changed that.

We've tightened our underwriting standards materially, which is bound to have an impact on trends. Therefore, we see a substantial reduction in trends, potentially due to some of the tightening of underwriting standards.

In analyzing your trend internally you need to decompose all these factors. How much is due to economic factors? How much is due to things we've done internally? We have begun to work with some of our actuaries who have focused on risk adjustment, to help develop an index specifically aimed at trend analysis. This will help strip some of the potential morbidity changes in our population from our trends, to find the true underlying trends.

Chart 2 shows an example of the morbidity index that was developed. It is not a rate of change. This is literally a level where 1.0 is a norm for the nationwide commercial population, which is significantly below 1, while creeping up toward 1.

The implication is that they've been experiencing morbidity change, independent of demographic shift. This is usually the type of case this segment has had on the books. We would have allocated a 5, 6 or 7 percent trend over a two-year period to change the morbidity.

The second segment has been up and down, but flat over the entire period, which is potentially luckily. The third segment illustrated here has had a morbidity index above 1 or worse than average, but due to case culling or the reduction of certain cases out of the book, we have brought that down to an average index.

We would have said that trends were lower during that time period, due to the change in morbidity. Essentially this is the result of using a retrospective risk adjustment where we ran claims through the risk adjustor, at rolling time periods, to create the index based on members who are on the books at that point in time. So it takes effort to try to understand how change in morbidity has affected our trend.

Other company-specific factors include measurements based on net trends, which is the dollars per-month, per-member (PMPM) that went out the door. This is affected by changes in plan design, demographics and company efforts to manage care, such as taking specific initiatives to control the costs of certain line items. Theoretically you need to back out those factors to a gross trend to really understand underlying trends.

Aetna does have sophisticated processes in place to build factors from net trends back in, to a gross trend level. We tag every single case with a plan design factor on a monthly basis, and roll those out to various aggregations for trend analysis, to turn them back into gross trends. The same thing goes with the demographics.

The bottom line is, Where are Aetna's trends today? We talk about the fact that trends were high. In 2002 we disclosed a trend of close to 14.5 percent, and we estimate that the 2003 trend will be between 9 and 10 percent.

Here's a caveat: these trends are a bit old. The numbers are taken from presentations we designed a couple of months ago, but they are our latest disclosed trends. We might have different answers today than two months ago, but I'm comfortable that the trends aren't much higher than that.

We have seen a significant improvement, and we are attempting, as an organization, to be as proactive and anticipatory as possible about where trends are headed. This goes for both pricing and financial forecasting purposes.

Finally, what factors lead to Aetna's lower trend? I already hinted at this, to say the general trend environment leads to a lower medical trend for everybody. We're in a low inflationary environment. The impact of the recession that began in early 2000 is beginning to have a material impact on medical trends.

While Aetna did loosen certain types of managed care policies, we have taken other initiatives to attempt to manage care differently. We believe that some of the initiatives are beginning to take hold, including disease management and focusing on the right patients, as opposed to a very broad shotgun approach to management. We think that favorable case culling or changes in underwriting policies have definitely had a favorable impact on our trends.

Finally, we have done some things to try and reign in and affect the impact of pharmacy cost, which has definitely had a material impact in 2003. It includes some things that we didn't count on or anticipate.

Those are the four major factors that lower Aetna trends. We suspect that some companies are sharing them, and others are definitely related to where Aetna was and where it has gone over the last three or four years.

MR. CHARLES FUHRER: It's much less exciting to try and figure out what the trend has been. If we project claim cost for a group or a portfolio, at least close to half of the trend is in the past. So it might be useful to know what's happened in the past.

First, I will talk about the scope of my discussion. Then I'm going to talk about standard methods that people are probably accustomed to using. This includes the very standard methods of dividing a year by the prior one. Then I will talk about doing a least squares exponential line to the data. Next I will introduce another method, which I call least absolute deviation, but it is really an extended least absolute deviation. Then I will show a couple of examples.

First, let's say that we have some claims data, and the first thing we will do is adjust them. Presumably, if you have paid claims data, you would rather look at incurred trends, so you will choose the claim reserve, already knowing if it is an estimate. So we'll construct an estimate based on an estimate.

The alternative to that, if you really want to do incurred trend, is to back it up three or four months. This involves even more of the past, so nothing is perfect in that regard. Presumably the claims data we will see are per person, per unit. That is even a little confusing. Will we do this per member? What if our member mix changes between children and adults? That could throw it off. If we do it per employee, it can also change by the family content changing. It's a matter of style in choosing what you think would work the best.

Our mix of plans might be changing. Peter sounded like he has a wonderful system at Aetna to do that. Once again, however, this is based on their estimate of plan differences. If those don't match the actual differences in his body of data, then he may not get the right result.

One alternative is to do this based on covered charges alone. This is good because the trend doesn't include things like deductible leveraging. On the other hand, it may be less useful.

Too much of a mix in data areas could be a problem. We see a difference in utilization and cost trends in different areas. We may want to subdivide the data into a bunch of very small areas, but the volatility in each of them might be huge because we don't have a big enough sample.

Alternatively we could adjust the claims in each area, and put them all together. But, once again, the adjustment factor will depend on the ability to estimate those differences, which are subject to problems.

Peter mentioned demographics, but since we have an inevitably aging population, I suggest taking that out. You can take it into account, though, when you price. On the other hand, you could include it as part of the overall aging of the country.

Peter also mentioned things I hadn't thought of, such as the changes in morbidity selection using risk adjustors. I think that's really neat. On the other hand, you need all the individual claim data to do this. You have to buy or rent a risk adjusting system and trust it. I'm not sure how good of an idea that is.

The last one he mentioned was strategic action initiatives. That sounds like a good idea if you made a big change in underwriting during the period. We should certainly adjust for it. I'm not exactly sure how to do this, but it is certainly a good idea.

Now I'm going to work with monthly claim data. Going down to weekly data may be more useful, but most of us work with monthly. Probably the simplest standard method is to take last year's claims—for example, from 2002—and divide them by 2001 claims after we make the adjustments.

This is a tremendously good idea. It can be identified to management or clients as the true trend that actually happened. Also, it's naturally adjusted by season, in case claims don't come in very well this way.

However, there are a number of problems with this method. One issue is that it's very sensitive to where the claims happen to fall. We could have a large amount of claims from way at the end of the first year that come out in that year. If so, we would get a reduced trend. However, if they don't come out at the end of the second year, we get an increase. The other problem is that it ignores the monthly data entirely. We do have a little more information that we should try to find a way to use.

Another method that might commonly be used is to compare calendar quarters. If we wanted to see the trend between 2002 and 2003, we could compare the last calendar quarter of 2003, and divide it by the last calendar quarter of 2002. It's also simple this way. It probably balances some of the problems that occur with the

annual one, but it has most of the same problems. In addition, there's a question of whether to use the last quarter of the year, or the quarter that ended November 30 or October 31. So it's not a very good solution.

We probably all know how to fit a linear trend. Now that we have spreadsheets we can probably fit exponential ones, which are really good. They take into account all the monthly data. They tend to smooth it out really well and are very easy to calculate.

The big disadvantage is that it tends to be highly influenced by the end points. If the last one or two months are high, there will be a much higher trend than you may like. It's very sensitive to that, as you'll see in the example that I'll give.

Now I will introduce another method, in which we fit an exponential curve. Instead of fitting the curve by the method of least squares, we're going to raise the least absolute deviation to a power, presumably between one and two. If we use two, then it's the same as least squares. If we use one, it's like a median. And if we use something in between, it's in between.

It's very useful. In fact, it cures a lot of the problems of least squares, and it's not very hard to calculate either. It's actually pretty hard to calculate by hand, but if you use an iterative method, it's easy. Excel has an application called Solver, which allows you to minimize a number by changing some other cells. I've found that it's very fast.

The only disadvantage that I can see is trying to figure out what power to raise it to. If you use too low of a power, near one, just like medians, it will totally ignore outliers, which may not be desirable. And if you use too high of a power, such as one too close to two, you have the same problem as least squares.

I have found, for most of the applications with trend, that something between 1.5 and 1.8 works well. You could look at it graphically and see what appeals to you.

Here are a couple of examples of what I call actual data, but not *real* data. I constructed them by taking a 10 percent trend and using a pseudo-random number generator to create the path that you see there. I have looked at many case trends as well as company trends over the years, and find that this is not an unusual pattern.

Then I calculated numbers, and the actual number this was based on was 10 percent. The annual method produced only 6.7 percent. You can see that it's 6.7 because we had that very high point within these twelve months. So the first year was raised a bit because of that. This illustrates the problems with the annual method.

Naturally the least squares did much better, coming much closer to 10 percent. Also, the least absolute deviation I calculated using a power of 1.8 did even better.

I will describe another example, which is exactly a 10 percent trend, with the last month being 20 percent higher. Can this happen? Yes. One big claim could throw off things. As we might have expected, the annual trend is way overestimated because it takes into account all those extra dollars. The same goes for the quarterly trend.

The least squares were not much better, though, because the slope of that line rotated based on the last point. The least absolute deviation methods were considerably closer. In fact, in this case the 1.0 exponential is the best because it tends to ignore those outliers entirely. I'm not recommending using that, but I wanted to show this as an example.

MS. LISA TOURVILLE: I'm with Ingenix, where I head up an area called Trend Analytics and Forecasting. I plan to talk about some of the specific factors we should consider when interpreting true underlying trend. We got some of the big ones: total utilization and total cost. A lot of things go into those factors besides just the basics. Total unit cost is made up of many different things, such as core unit price, actual price and contracting changes, which are shown in the lower, right-hand corner of Chart 3. Brian will cover that in his presentation.

Regarding intensity of a mix of services in the customer industry, gaining or losing large groups could impact the bottom line, as well as demographics, geographics, or the medical pharmacy pipeline. That's where we track all the new technologies and changes in guidelines that are coming out.

Regarding product mix, if you are shifting between HMOs and PPOs, try to keep a handle on what's going on there. And workday—I'll talk a little more about that. Then there's policy process change. Any changes within your organization could impact the overall claims payment process.

On the total unit cost side, Chart 3 is an example of our customer blocks—the physician cost of the procedure that we've seen historically. There is a pretty straight linear increase through time, with the 12-month rolling average. We do have models in the field that people are using to try to help quantify the contractual part.

But, as we've learned through the years, use of these models requires a lot of education. Historically we ran into problems where one large hospital system turned and became nonpar. They didn't think they needed to include that information, but it had a huge impact on per-unit cost.

We've had issues such as, even though the basic contract was per diem based, outlier provisions came through the back door and haunted us on the overall unit

cost. Capturing the price piece, which may be fairly simple, has been difficult in some cases.

On the utilization side, many of the components that impact unit costs also impact utilization. Only a few components don't do this, including underwriting.

Again, look at the physician procedures per thousand in the slope of the graph. Couple that with the cost of procedure, and you can see why trends have been such a problem.

So where do you focus? Obviously core utilization and core unit cost are big issues. There are regression models to use on the utilization side. We've got our pricing models on the unit cost, but there are many other components. Core utilization and core unit cost make up nearly 60 percent of trend. That leaves an additional 40 percent. It is very important to understand what's happening and work to quantify it.

Demographics include the inevitable aging of the population. As seen in Chart 4 in a population pyramid for the United States for 2000, until you get to a pyramid shape where each age band continually replenishes the next one, there will always be a demographic impact. That's definitely something to keep in mind.

We've seen ranges anywhere from -1 percent, where they've lost some high-cost groups, all the way up to +5 percent, where they've lost some very low-cost groups and gained some high-cost ones. Having a good handle on what's happening with the aging of the population can be pretty important.

Medical technology is another trend. People don't tend to look at this as being very important, but as we tracked this in detail for the last several years, we have seen large ranges on the projected impact of trend. We looked at changes in guidelines and new diagnostic tests, treatments and technologies. One of the examples is drug-eluting stents, where, for people treated with cardiac catheterization, utilization is assumed to be 1.5 per thousand.

The maximum expected increase in utilization is 20 percent, given those with cardiac disease requiring stents. Assumed utilization will increase by 15 percent. Incremental cost with drug-eluting stents is projected to be \$2,000, and we can assume it will actually cost \$3,000, once Medicare shifts costs.

The cost formula is 42 cents PMPM. Depending on the baseline PMPMs, maximum possible impact on trend is 20 basis points. This is just one of several examples. When you add them all up, you can see how there would be an impact.

On the pharmacy side, it's the same thing. A lot of changes could impact the future trend, such as brand name patent expirations, moving from prescription to over-

the-counter drugs, changes in guidelines and changes in Food and Drug Administration (FDA) status.

One example is Synthroid, which came under fire with the FDA a couple of years ago. It had been grandfathered in early on, but had to go through the approval process and was at risk of losing its overall approval.

We studied this and determined it would have cost more money from a carrier point of view, because there was a generic version of the drug. The generic one had been out there for a long time, but it was not much cheaper. I think it was \$15 for Synthroid and \$14 for the generic.

Since Synthroid was a brand name, it had a \$20 co-pay, and the generic had a \$10 co-pay. So there was a situation where the patient was paying the full amount for the brand version of Synthroid, and the health plan was picking up a portion of the generic substitute. It would have cost Synthroid money if they had lost the approval, but they didn't.

Also, there are always new medications. One example is FluMist. The estimated incremental cost for vaccination is \$30. Annually 80.5 million commercial patients are expected to receive it.

Ultimately the worst-case scenario is 62 cents PMPM, which translates to somewhere near 30 basis points on trend. If you keep adding these up, you can get some pretty high numbers. We expect 2004 numbers to be higher than what we've seen in the last several years, which includes such items as implantable defibrillators. A couple of things are hitting in 2004 that we haven't seen an exposure to historically.

Workday calendar adjustments are another one that a lot of actuaries brush off as us being silly and trying to find ways to look important, but they can really have an impact, simply due to the calendar makeup. 2004 is a perfect example because it's a leap year.

The bottom line is physician PMPM costs are higher on a Monday. Pharmacy costs are higher on a Monday. Inpatient costs are higher on a Friday. Depending on how your calendar is divided, by quarter or month, however you look at things, you can see some impact. It's important to understand these impacts and make sure underwriting is pricing for them. Make sure executive management understands that when a trend comes you need to adjust for the workday calendar because it may not be as bad as it looks. There were just one or two more days when people could have received services.

You can see some of the historical quarterly impacts here. On the underwriting side, if an experience period is five quarters long, or within the timeframe from experience to projection, you can definitely see how to get a large impact, due to workday alone. That is something else to keep in mind.

Finally, there's consumer demand. Does advertising really impact health care costs? That question has been asked of us several times. Here are a couple of old advertisements that we found. Chart 5 depicts an ad from the late 1800s. Here they concluded that mothers were too ignorant of children's diseases, which is why they needed to buy this medication for worms.

Chart 6 shows an ad from 1942. Several of the physicians had just gone off to war, and Parke, Davis & Company pleaded with people not to go to the doctor unless they were very sick. The doctors who were left at home had to take on all the patients, which was very difficult for their workload.

What we can measure at this point is some of the more recent activities. Since Katie Couric lost her husband to colon cancer, she has been on quite a crusade. She had a colonoscopy done on national TV in March 2000. In 1999, 10 colonoscopies were performed per every 1,000 adults. By the end of 2000 the number went to 15. Ms. Couric continued on her crusade, and by 2001 they were up to 20 per 1,000 adults. In 2002 she had a virtual colonoscopy done in the first quarter, and in that year we were up to 25 colonoscopies per 1,000 adults. So there was definitely an impact in this case.

Another example is the gastric bypass surgery that we hear about more frequently. A couple of people who had them done were well publicized. Carnie Wilson, daughter of the Beach Boys' Brian Wilson, and Al Roeker from the "Today Show." Utilization has almost tripled in the two years since they had this surgery. So medical procedure popularity is another thing that we're watching closely, and making sure it's being considered in our forecasting.

MR. SMALL: I am the Vice President of Provider Reimbursement at Blue Cross, Louisiana. I work with our contracting department doing financial analysis. In addition, I work with our actuarial department to forecast cost-per-unit trends.

I want to give some insight on two of the factors I work with every day. The big influences are hospital and facility trends, specifically hospital charge trends and the expansion of physician-owned facilities.

Hospital cost-per-unit trends have been rising in the past couple of years. The last CPI number that I saw for hospital services was close to 10 percent, whereas the physician services and the CPI are closer to 3 percent. Nursing shortages, technology increases and malpractice all contribute to the rise in hospital costs.

While physicians employ nurses, their salary is not going up quite as much. Is something else going on? Part of the reason the hospitals' per-unit cost is going up so much is they have a mechanism to get these reimbursement increases without negotiating, which is by raising their charges. Many people have discounted the influence of charges because hospitals are on per diems, and they're on case rates. So charges don't matter, right? No, they do matter. They matter a great deal.

I had a conversation with a hospital administrator three or four months ago. I wanted to talk about charge master plans and whether or not they would go up. I wanted to take that into account, along with the negotiation, but he was quite incensed because we were insulated from charge trend, so he thought it shouldn't really matter.

I had to prove to him that it did matter, which is what I'm going to share with you today. I took his data and ran those on the proposed contract with and without the charge trends. I compared the differences, broke them down by category and showed him how charge trends do matter.

This is what happened. We had 1,109 inpatient claims. And, just as the hospital administrator suspected, with 87 percent of them the charge trend didn't matter whatsoever. Before charge trends, 966 were paid a per diem, and with the charge trend they were still paid a per diem. In this case, then, there was no impact due to the charge trend increase.

However, for 98 of the cases, before the charge trend, they were paid on the "lesser of" provision because the charge was less than the per diem. So we paid a "lesser of" the two, and they were paid on the charge. When you raise these charges, as we modeled here, they would have almost the full impact of the charge trend, up to the per diem. On 37 cases they paid at the outlier before the charge trend. After the charge trend, they also paid on the outlier, so they got the full benefit of the charge increase.

On eight cases they hit the outlier provision. They would have won the jackpot if their charges were higher. They came in just below the outlier, and the charge trend increase bumped them over. They got a 79 percent increase on these eight cases. This hospital's little 6 percent charge trend increase got them 3 percent. If they would not have come to us for a negotiation, and just raised charges 12 percent, it would have been a lot easier for them, which we took into account.

People are realizing that charge trend matters. In fact, the government has put quite a bit of pressure on this issue. For example, the government discovered that Tenet Corporation had such high charges because they were taking advantage of Medicare's meager outlier provision to leverage their reimbursement.

So there's considerable scrutiny now on hospital charge trend. That's good news for us because it's going to cause some slowing down in hospital charge trend, and maybe it will trickle down to slower cost-per-unit trends.

The next area is the physician-owned-facility building frenzy. In Louisiana many of these hospitals and ambulatory surgical centers (ASCs) are being built. We will have 16 new specialty hospitals between 2002 and 2003. We have only 150 hospitals right now, so they're increasing the number of hospitals by 10 percent. In addition, we will have eight new ambulatory surgical centers.

What's going on with this? Well, urologists, orthopods and general surgeons are building 12 specialty surgical hospitals and ASCs, and cardiologists are partnering with those entities to build four heart hospitals.

What's driving this? Money, I suspect, which makes sense. Medicare pays an ASC on an ASC program, and they pay a hospital on an ambulatory patient classification (APC). A hospital can do a lot more of the procedures on that APC list than the ASCs, which are pretty limited. Also, the APC gets an average of 30 percent higher reimbursement than the ASC, so it makes a lot of sense for these medical centers to pop up. In fact, a lot of these specialty hospitals are ASCs that are converting over to the specialty hospitals.

I spend a lot of time thinking about whether this is good or bad thing, or if we know. Will there be higher quality? Perhaps. Certainly the specialty hospital owners would tell you so. If you go to a specialty hospital, I would guess you'd get better care. Another positive factor is that there will be more competition, which may be good for the per-unit cost.

Also, there would be some reduction in operating and scheduling delays, which is one of the big reasons physicians say they're building these facilities. If, for example, a child needs an appendectomy, the parents don't want to wait for an operating room to open up. The doctors would rather build the new hospital or APC and see the child more quickly. So that is a good thing.

On the negative side, while there may be increased quality at a specialty hospital, the general hospital will lose the experts who used to do whatever they do now at the specialty hospital.

Overall these new facilities will lead to a lower quality of acute hospitals because there will be fragmented care. It will certainly add to the nursing shortage crisis because they will need to staff these beds. Also, specialty hospitals lack critical care services. If you are having a surgery and something goes bad, they're going to have to take you in an ambulance to the general surgeon. Then Blue Cross probably will have to pay twice, as they have to pay both the specialty hospital and the general hospital.

The other negative point is they will surely take the profitable cases, causing financial damage to the community and to the acute hospitals because the doctors may not admit the no-pays, the uninsured or Medicaid patients. They're probably going to send them to the general hospital. Certainly there will be some cherry picking.

What's the impact of these physician-owned facilities? In the short term you might be able to get a little cost-per-unit savings because these are new hospitals that need patients. They will probably contract you at favorable rates.

On the flip side there will probably be increased utilization. Physicians will intend to do more procedures in their facilities, as Peter alluded to. When there is a greater supply, demand will increase.

Another thing that's going to happen, which we've seen happen, is a movement from office-based procedures to facility-based ones. In the past the urologist might do a cystoscopy, for example, in the office and get paid the professional bill. Now if this doctor owns a hospital, he or she will take that procedure into the hospital facility. This way the doctor will get a facility bill and a professional bill. This will probably add some cost to the health system. It is fragmentation of care.

So the jury is still out on these issues. I don't know why investors would put so much money into them, because we don't know if they're going to work. Certain hospital administrators have told us they think they're all going to go under, just like hospital-owned health plans.

It may be just another bad investment. Maybe the general hospitals will be able to pick up these facilities at bargain rates, and we will go on as always. Or maybe this is the new paradigm in care, and they will demonstrate that they have higher quality, and there will be a market demand.

MR. HOBSON CARROLL: I'm with Vector Risk Analysis. Yesterday in the stop-loss session a reference was made to a fairly recent blip about the frequency of high-cost claims on children. While this, of course, is a base-cost session, I wonder if anyone could comment on whether you see things like that and what might be driving it.

MR. SMALL: I look at hospital claims all the time, so I see that the neonates are incredibly expensive and sometimes drive a substantial amount of trend in one quarter. Cost-per-unit trend can relate to just one neonate. These are all outlier claims, and hospital charges relate to that.

MS. TOURVILLE: We definitely studied the large claims, but I don't have the detailed knowledge of what's driving the newborns and the neonates.

FROM THE FLOOR: I'm an independent health care consultant. I used to work for Aetna, so I have a question for Peter. I am interested in your overall trend data for 2002 and 2003. Can you comment generally on your mix of business, between point-of-service, HMO, PPO and Medicare? Are you willing to share the trends for these various mixes?

MR. REILLY: I can't give you an insight into the process that we have in place because we don't analyze the trends aggregated like that. We look at them in detail, by segment and local market. Therefore, each of those segments that you talked about will be analyzed separately. I'm not involved in a small group per se, or Medicare, so it's hard to comment. We do analyze PPO separately as well.

Am I willing to tell you what our trends are? No. Am I willing to tell you that they've come down? Absolutely. They have come down broadly across all our segments and product platforms, so we haven't just seen this in a particular segment or product. It has been very broad and consistent.

MR. TIM KELLY: I'm with Guy Carpenter. On the property and casualty side, you tend to split the risk into the baseline of primary rates and then excess rates. When you talk about all the factors that can affect trend, do you ever think of that example where eight of the outliers turned into large claims, examining excess costs separately, so that you could get a better idea of how to predict the trend within your statistical credibility? Has that been done?

MR. REILLY: We do a large claim adjustment, which I left out of my presentation. We look at that, measure it and adjust our trend data to spread dollars more evenly across time periods.

MR. SMALL: I would hate to ignore those eight claims because they might account for 25 percent of the reimbursement at the hospital. When you look at things like when to throw out a claim, for example, the arrival of these neonates can really drive the cost index of the hospital. It's hard to know.

MS. CAROL MCCALL: I'm with Humana. This is a question for all of you, but particularly for Lisa. You had talked about a couple of trends that you expect to be high in 2004, and a few places where we have new exposure. The first part of my question is whether or not you were referring to colonoscopies and gastric bypass? If not, what are you seeing out there? Part two is, How much of trend would you attribute to this kind of emerging technology?

MS. TOURVILLE: When talking about 2004, overall I do not expect high trends, but there will definitely be some impact. I was focusing on medical technology. We're expecting a bigger year in 2004 than we've seen in the last couple of years. It's not so much the colonoscopies or any specific procedure. It's mostly specific devices and new technologies that will hit the marketplace, such as the defibrillators, the stents and the new drugs such as FluMist.

We're getting savings with some of the drugs, such as Claritin, since it has gone over the counter. This has helped a great deal in 2003. Some other medications are expected to have a generic equivalent soon. Several things like that that will help, but in 2004, especially on the outpatient side, we expect some pretty heavy impacts from technology.

MS. MCCALL: The second part of the question is, if you break down trends, often by utilization and unit cost, this is really past versus future, or emerging technologies versus demand for existing technology, right?

MS. TOURVILLE: An easy 5–10 percent of the trend could come from the technologies and the changes in guidelines.

MR. SMALL: There is such a list of new medical products that it really makes you think trends are going to increase. Every hospital in Louisiana is gearing up for the gastric bypass industry. They're all asking for reimbursement for gastric bypasses. We anticipate legislative action will make us pay for these things, and the hospital bill alone is close to \$30,000.

MS. TOURVILLE: That's the other thing that's been interesting. The utilization for that procedure has almost tripled, yet it is not covered. It's only covered when medically necessary, yet somehow they're all slipping in under the medically necessary provision.

MR. DAVID BEALE: I'm with Morgan Stanley. Peter, your numbers seem to show that trends are decelerating from year to year. Could the rest of you comment on whether or not that's your view also, that we're seeing some moderation in cost trends? Is that sustainable? And what sort of a baseline cost trend is there? It seems like eight to nine is the bottom. How low can we go?

MS. TOURVILLE: The tide has definitely turned. There's no question about that. How low it will go? That's heavily dependent on which kind of initiatives each payer takes on. There will always be issues on the contracting side, with which we will have to deal. Utilization, I think, is where we have really seen a change, and that's where things will improve.

MR. SMALL: The hospital component has been going up over the last couple of years, and maybe it will trail off a bit. I don't think it's going to go much lower though. I think it's going to go back up. As Peter mentioned, we've had some one-time pharmacy savings, but I say it's going back up.

MR. REILLY: Aetna has definitely had specific things that have led to greater deceleration than other folks have. We came in higher to begin with where we were. I think that the environment does support a couple-of-points decrease in the general trend levels. I wouldn't be surprised if it went below 8–9 percent.

Despite the very low inflationary environment, I believe the risk will increase over the next three to four years, if inflationary levels begin to creep back up, even though we're now at 1.5 to 2 percent. If you go back up to a 4–5 percent environment, that's a significant upside risk, particularly at the same time as the back drop of an improving economy that will have an impact down the road.

In terms of a pricing cycle, we will probably bottom out and have another year or two with fairly favorable trends; then the risks will rise from there in my opinion. People have plenty of time to get their pricings.

MR. GREGORY DELAMARTER: I'm with Regence Blue Shield. I have a question for Lisa regarding the drug-eluting stent. One of the things that I've heard about, in its defense, is that a lot of people will now be able to have the stent procedure instead of more invasive coronary artery bypass graft surgery. Therefore, there could be some mitigating effect, perhaps even a net reduction because of the change in the way certain procedures are performed, and substituting this lesser expensive procedure.

Do you have any thoughts on that? Then, more generally, as it relates to some of these new technologies and procedures that are coming out, are offsetting effects likely?

MS. TOURVILLE: That's a great question. On the stents we expect long-term effects, but no immediate-term effects. They have shortened the stents, so they use more of them in each procedure now, and the new ones are more expensive. So three years down the road, you'll definitely see savings there.

MR. DELAMARTER: And the rest of the question is, What is happening with some of the other procedures coming down the pipe?

MS. TOURVILLE: It's been very interesting to go through and try to price all these things. There have even been situations where injectable drugs are replaced by oral medications. There will be a reduction on the outpatient side or the physician side, depending on where you code them. There will be an increase on the pharmacy side. Offsetting will be a savings overall. We look at that very closely too.

Chart 1

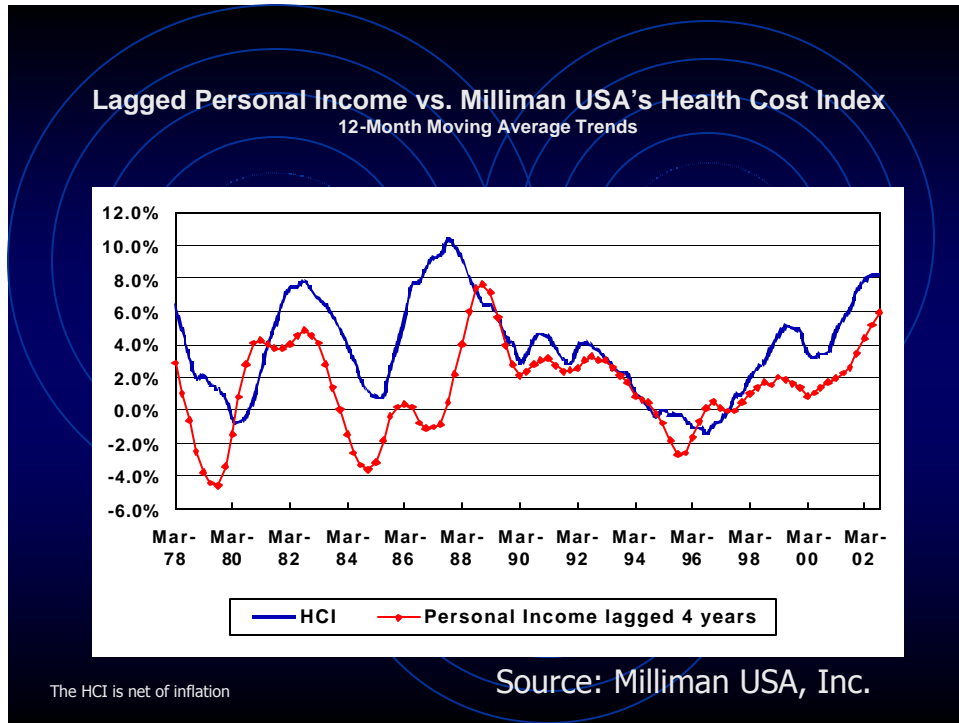


Chart 2

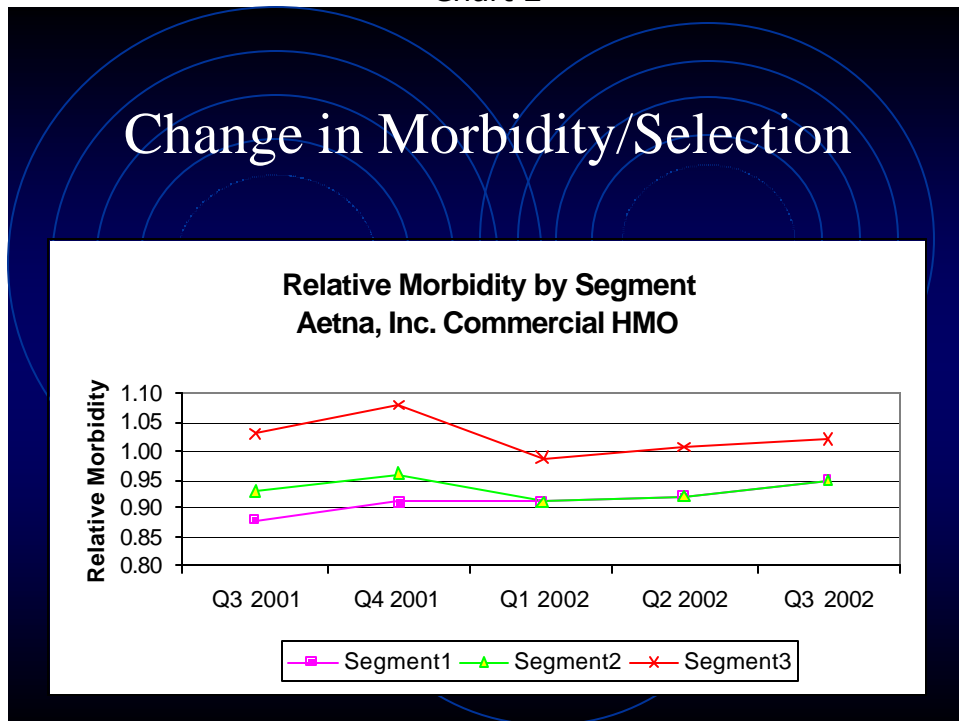


Chart 3

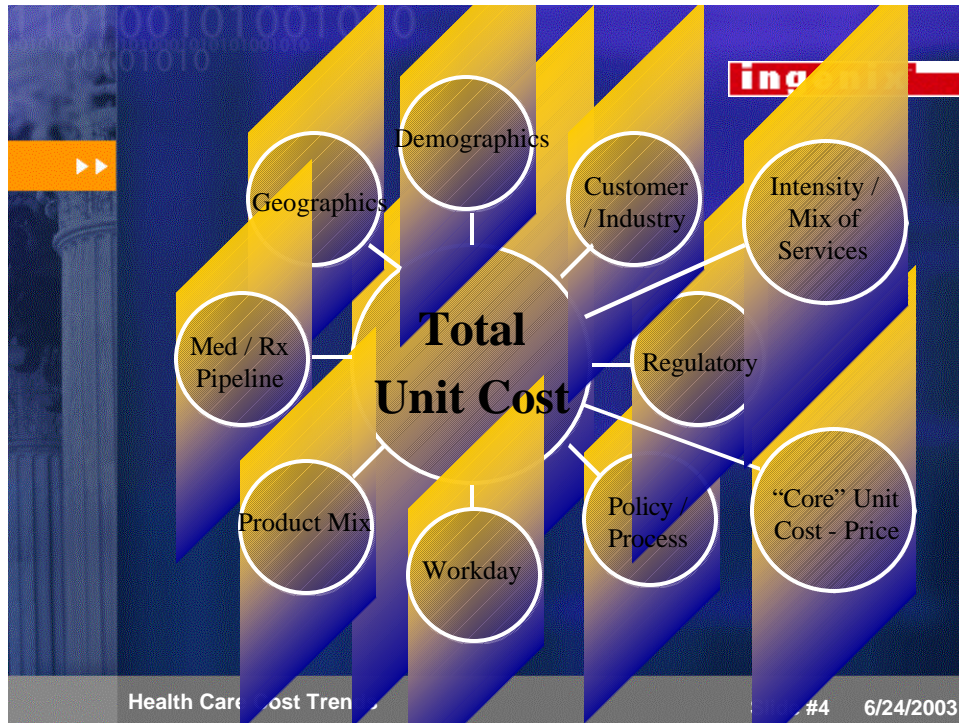


Chart 4

Demographics

- ▶ Natural Aging of Population
- ▶ 2002 crash of high-tech companies – younger population exiting market
- ▶ Impact on trend of changing demographics = 1-2%

The population pyramid shows the distribution of the U.S. population by age group and gender in the year 2000. The x-axis represents the number of people in millions, ranging from 0 to 100 million on both sides of the central axis. The y-axis represents age groups from 0 to 80+. The pyramid is divided into male (left) and female (right) populations. The chart shows a relatively balanced distribution across age groups, with a slight tapering at the top.

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Chart 5



Comstock's Dead Shot Pellets for Worms.

W. H. COMSTOCK, Sole Proprietor,
MORRISTOWN, N. Y.

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The Albino Center never intended that more than half of the children should die before they are 3 years old. What is the reason? We think it is, on the part of the mother, too much ignorance of children's diseases, and the neglect to apply a remedy in time. Now one of the most troublesome complaints of childhood is Worms. Mothers, read my pamphlet, and you may learn in a few minutes all that is useful to you in the case of your children.

Comstock's Dead Shot Pellets for Worms is the best medicine for Worms extant, and will surely cure your child, while it can possibly do no harm. Comstock's Dead Shot Pellets for Worms are for sale by all Agents for Morse's Indian Root Pills.

FOR BABY

"We think it is, on the part of the mother, too much ignorance of children's diseases, and the neglect to apply a remedy in time."

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<http://scriptorium.lib.duke.edu/eaar>

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Chart 6



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"...many thousands of physicians have left their private practice to serve with our armed forces."

"Since your family physician may have to do the work formerly done by two, or even three physicians, he will need all the help and cooperation . . ."

1942

A medical problem your doctor seldom talks about

PARKE, DAVIS & COMPANY

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