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Session 65OF
The Dental Market

Track: Health

Moderator: JOHN T. KUNSTMAN
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Recorder: JOHN T. KUNSTMAN

Summary: Panelists provide their perspectives on current issues in the dental market, such as:

- *Product development*
- *Experience trends*
- *Competitive marketplace*
- *Future outlook*

MR. JOHN T. KUNSTMAN: I am a group actuary at Shenandoah Life Insurance Company in Roanoke, Virginia. Our first speaker is Evelyn Ireland, and Evelyn is the executive director of The National Association of Dental Plans. She is a frequent speaker on trends in the dental benefits, and is knowledgeable about players in the industry, as well as the detailed dental benefits industry data collected annually by NADP. She has been director of NADP since '92. NADP is headquartered here in Dallas. In '99, Ms. Ireland was the only insurance executive recognized as one of the 25 influential dental leaders by the Dental Manufacturers Association of America.

Prior to joining NADP, Ms. Ireland spent over 20 years in various segments of the insurance industry. Her experience includes being a congressional staffer to former Texas Senator Lloyd Bentsen, 10 years as a Texas insurance regulator, and six years as a lobbyist in Texas for insurance and other industries.
Our second speaker will be Ray Martin. Ray is a consultant with Tillinghast-Towers Perrin in St. Louis, where he has been since '83. Ray's work includes developing dental rating manuals and preparing dental rate and experience surveys.
Our third speaker is Ed Kiernan, director and actuary for Delta Dental Plan of Michigan, Ohio, and Indiana. Ed has worked with Delta since '75. He is a member of

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†Ms. Ireland, not a member of the sponsoring organizations, is Executive Director of The National Association of Dental Plans in Dallas, TX.

Note: The charts referred to in the text can be found at the end of the manuscript.

the AAA and he has worked with a number of other dental plans on a consulting basis.

MS. EVELYN F. IRELAND: I am clearly the generalist in this group. I'm going to go over the dental benefits market with some very broad data, and then I'm going to talk about some trends that impact the dental benefits market and where it's going. But first, I want to quickly focus on NADP.

NADP is known as the representative and recognized resource of the dental benefits industry, and that's because of our two centers of expertise. We do government relations work 'because the dental benefits industry is a regulated industry. While regulation primarily occurs at the state level, more and more regulation is being added at the federal level. We do state and federal legislative/regulatory tracking. We have a tracking service on our Web site that is accessible to members 24/7. We do lobbying at the state and at the federal level. We do coordinated industry action, grass roots action, summary reports on enacted legislation at the end of every year, and we maintain a political action committee or "PAC"

On the information side, we're primarily known for our statistical data collection, i.e. enrollment and network data, financial performance of the industry, and premium trends. For the first time, we're going to publish some operational benchmarks on the industry, particularly, in claims center and claims processing cost centers.

The newest part of our information function is a function on our Web site called *DentiFacts*. It's only open to members at this point, but it will eventually be open to the public, as well. *DentiFacts* is an index of other sources of data and information on the dental benefits industry. What we're trying to do is compile reports that have been screened to assure that they have good information on the dental benefits industry in addition to our own. And we're doing that, primarily, in two areas; sales and marketing data and then data on clinical studies and research in the dental delivery system arena.

This is who we represent. NADP, for those of you that know about our history, started out as a dental HMO organization. When you look at our data, our data is deeper in the HMO area. But as the market changed, NADP changed as well. Today, our members are dental HMOs, PPOs, indemnity plans, and referral plans. There aren't very many stand-alone referral plans, but referral, I think, is somewhat unique to the dental benefits industry, and the ancillary products industry. Basically, it's like a discount card to buy product. You go into the dental benefits office and you pay out-of-pocket the full fee, so it's not an insurance product, but it is a way of getting a discount off of the set fee of the providers in those networks.

Our members are all those companies. We also have Deltas and Blues carriers and our members write approximately 75% of the total dental benefits market. We also have non-voting members that are related service and product industries to the dental benefits market. In addition, we have companies outside of the U.S. ''Finally, we have dental practice management companies as members as well.

Our mission is to promote and advance the dental benefits industry to improve consumer access to affordable quality dental care.

First I'm going to define the market in terms of enrollment data then talk a little bit about differentiation between products and geographic distribution, because this is the part of the data where we have the most depth. I'll talk about cost trends in terms of premiums, and then at the end, I'll talk about factors affecting the market: the economy, human resources trends, technology, and regulation.

But before I get into the detail, I always find that it's a good thing to step back and look at what the industry does overall for dental health. The dental benefits industry has a tremendous impact on the use of dental services, and subsequently, on dental health. There was an ADA study that actually tracked the trends and use of dental services for 10 years, but most recently, the Surgeon General's report on oral health shows that when dental benefits exist, there's a 20% increase in the use of services for those individuals using the services. About half of the population without dental benefits does not access dental care on an annual basis, whereas over 70% access care when they have private dental insurance. The dental benefits market has a tremendous impact on the use of services.

The dental benefits industry at a glance is probably the chart that NADP is best known for. We update it annually. It is the only full market study of the dental benefits industry that's been done since the federal government did an estimate at the end of the '80s, showing that the dental benefits market at that time was 95 million people. In '99, which was the last full year that we had data for, 56% of the total population had dental benefits. In '98, the mix of network-based versus indemnity benefits changed. If you look at the numbers in '98, for the first time you see that the dental managed care segment of the market is larger than the indemnity segment of the market. In '99, network benefits were 57% of the market, where indemnity was only 43%. The network-based portion breaks down into 27 million in dental HMO, 48 million in dental PPO, 12 million in referral. All of those are network-based products, which is the 87 million versus the 43% or 65 million in indemnity products.

According to the Surgeon General's report, there are 108 million individuals without dental benefits insurance, but our data actually shows that number is a little higher.

The enrollment growth survey is simply an early-year snapshot of enrollment growth, using the companies that comprise roughly between 50-87% of the market. In the dental HMO, we had almost 87% of the market represented in this sample. Dental PPO was about 70% and the other two was a little over or around 55. This just gives us an idea as to whether the enrollment trend is continuing before we publish our full enrollment survey in the middle of the year. There is a continued downturn in '00 and '01 in dental HMO, with a decline of 8% in '00 and a little over 1% at the beginning of the year. Dental PPO is still showing very strong growth, with over 20% in '00 and another 6% at the beginning of the year. The dental referral is 126%, actually, about half of that results from one company getting two very large groups. And when you take that company out, the growth

rate is in the 50% range, but still that's very high for the dental referral market, which is primarily an individual and voluntary group market. And dental indemnity continues to show a decline at the end of the year, although it's slightly up at the beginning of the year.

I might point out that changing the dental indemnity does change the total enrollment in the market. In this particular sample, which is roughly two-thirds of the total market; it's 112 million and the growth rate overall in the market at the beginning of the year is 3.96% or around 4%. Overall, even though they're shifting between lines of benefits, there is continued expansion in the dental benefits market.

Sometimes we like to go out and look at other surveys, just to see if the trends we're seeing are validated by other surveys. The Mercer, Foster, Higgins report is a national survey that is a random stratified sample of employers of all sizes. It's one that we like to compare against. It has showed pretty consistently for the last several years, that a little over half of all employers offered dental benefits insurance. Of course, for large employers that number is higher, north of 80%. Because there are so many smaller employers, that brings the overall average down. Dental PPOs, they showed with their '00 survey, rose sharply for a second year, increasing from 32% to 42%--just the number of companies that are offering them. And the cost of dental coverage went up about one percent to $470 per employee and there really hasn't been much change in the last several years, either in the deductible or the maximum annual benefit.

We have tracked dental HMO enrollment growth since 1990. It peaked in '98 and has been declining since that time. The decline, most of the people in the market relate to both the introduction and penetration of PPO products, which really only began in the mid-'90s, as well as the tight employment market, which results in offering a wider array of benefits and reimbursment at higher levels.

One thing I want you to note here, between '94 and '97 the dental HMO grew tremendously. Later on I'll mention overall economics that frame that time period and give you some reason why that's the time period where dental HMO grew the most.

Interestingly, even though dental HMO enrollment is going down overall, the enrollment in one segment of the dental HMO market is continuing go up, and that's the Medicaid market. Until the mid-'90s, there really wasn't much Medicaid dental that was offered. Primarily, to that point it was in Arizona, I believe. Tennessee introduced it in a number of other states. They turned to dental HMOs to add that to their Medicaid market and you can see that there's tremendous growth in Medicaid in the late '90s, even though there's a decline overall in HMO, which tells you that there is a further decline in the commercial marketplace in dental HMO.

NADP has tracked Dental PPOs since the mid-'90s, because that's really when the dental PPO product was introduced. Until that time, the dental benefits market

consisted of dental indemnity and dental HMOs. That's part of the reason NADP was an HMO association. Those were the two dental benefit products until the mid-'90s, and when you saw the huge growth in dental HMO, a lot of that was migration from indemnity. At that point, the indemnity carriers introduced the PPO product really to compete with dental HMO and that product began to take off.

Our '00 dental benefits report, includes '99 data. The '00 estimate is given by the companies themselves. Historically, what we've always found in looking at what the companies estimate when they have a strong growth trend, is that they over-estimate. If you look at our EGS report, the Enrollment Growth Survey, what you would find just extrapolated is that in '00, the enrollment in dental PPO is at about 58 million and then at the beginning of '01, it was about 62.5 million or it came close to the mark that they estimated for the end of '00.

Dental referral is a smaller segment of the market. There's no regulation—well, there are two states that have a registration process, but there's really no regulation of this type of benefit. As I said, it's really a discount card with a focus on both individual and voluntary group. The most common call that we get from consumers is: Where do I find a dental benefit plan? Most of the other dental insurance products don't offer many individual products; the focus is on individual products. This has contributed to the growth of the dental referral benefit. By the way, we do have a function or a web site where consumers can go in and print out a list with contact information for dental benefit companies by state.

We haven't tracked dental indemnity over a long period of time. We just have a couple of years of data on dental HMO, PPO, referral and indemnity by state, but I wanted to talk about geographic penetration. When you use 10 states, you can get to almost 80% of the total HMO market. The unique states in this group are Tennessee, Arizona and Maryland. Tennessee and Arizona are big Medicaid markets, and that's the reason for the penetration in those states. Maryland, I think, is primarily because of the government employment.

As for dental PPOs, with 10 states you can get to 70% of the market. Michigan, Ohio, and Massachusetts are the unique states in this group, and that might be because of the industrialization of those states.

With dental referrals you get again, almost 80% of the market in 10 states. California has the most active dental benefits market in the U.S.

The three common states to the network charts are Pennsylvania, Florida, and Illinois. Pennsylvania, I think, is largely because we have one very large Blues plan in Pennsylvania, which is focused in these products. Florida and Illinois both have a Limited Health Service Organization Act, which is an Act that promotes the formation of independent or stand-alone dental plans.

In the top 10 dental indemnity states, again California is leading the pack. The states that are common in all four types of dental benefits are California, Texas,

New York, and New Jersey. The ones that are unique to indemnity are Minnesota, Wisconsin, and North Carolina.

Taking a broader look by regional dental HMO penetration, California leads in the development of dental HMOs, with the Knox-Keene Act. It has the highest penetration of dental HMOs at 15.7% of the Pacific region. The other regions that have the highest penetration are the mid-Atlantic, the South Atlantic and the mountain region.

In the regional penetration of Dental PPO, again, the Pacific region is high, but it's not the highest. You may remember that I mentioned the industrial states and the top 10 for dental PPO, so the Northeast, North Atlantic, and the East North Central really are the highest penetration states or regions for dental PPO.

Dental referral has pretty even penetration across the U.S. It's in the 1-2% range, although you see the East North Central and the South Atlantic have the highest penetration. Those actually are where some of the largest stand-alone dental referral plans are located.

Dental indemnity, again, with the focus on the industrialized states, the Northeast, the West, and the East North Central are the highest penetration regions for indemnity dental benefits overall.

We're in the process of developing an agreement with the Delta Association to take the Delta information that we don't have by state, combine it with our information, and get a true regional and by-state penetration of the entire dental benefits market. Based on our data alone, the Pacific region is the highest penetrated region followed by the Northeast Mid-Atlantic and East North Central.

Now let's talk for just a minute about cost. Historically, we've collected data only on group products and premiums. There really isn't that much in terms of individual product, except for referral. The dental HMO premium has been relatively flat since the mid-'90s, and that may also have something to do with some of the downward trend in dental HMO—not because it's more costly and so people aren't buying it, but because there is not an increasing pool of money to go to the dentist, so some dentists have dropped out of dental HMOs, making the network smaller and less attractive to enrollees.

The interesting thing, though, is that the gap between dental HMO, PPO, and indemnity has been increasing. And that gap could drive the market back in to the dental HMO product. Especially as the employment market loosens up, and employers shift to pay more medical costs and possibly shift more costs to employees. But that gap has been increasing, and I believe it is roughly a 50% gap between the premium rates now. Just so you know, in terms of cost of a referral product, our most recent report does have that data in it, too. It's not on a comparative chart, because it's not insurance premium. They're referred to as membership fees. And the range of membership fees for dental referral products is from $3 to $6 per month for an individual, and $6 to $9 a month for family. For

that amount of money, you get a card, go to the dentist, and get discounted fees from that dentist.

Now I'm going to turn to a series of factors affecting the dental benefit market. Remember when I mentioned the biggest growth in the dental market was between '94 and '97? One of the reasons for that is because medical costs were at their lowest, and more dental benefits were being added to the product mix. Surveys have shown that employees value dental as one of their top three benefits, along with medical and pharmacy. When you see U.S. Chamber Surveys and other surveys, you also see dental as one of the most valued benefits. Particularly among younger employees, who don't necessarily think they have to have medical when they've got the ability to purchase dental. Many times they'll go into dental. When the medical costs were low, you saw the HMO growth rate at its highest.

Some of the other trends, besides economic and employee-benefit, are general HR trends affecting the dental benefits market. As we all know, medical costs are going up. Mercer indicated in their survey that employers are going to compensate for that rise in medical costs. Forty percent said they would increase contribution levels, 17% would raise the deductible, and of the large employers, they're going to raise employee contributions or shift through other cost-sharing avenues and that can definitely have an impact on the dental benefits market.

Although our plans have not reported it, and there isn't individual market experience, I read this week in *Employee Benefit News,* that more employers are going to give their employees the ability to purchase the products that they want, kind of like in a self-directed 401(k). Basically, you get a pool of money and a menu of choices. That can work for or against a dental benefit plan, but it definitely changes the marketing that a dental benefits plan has to do in order to be selected by the employee.

Another issue I want to talk about in terms of the impact on the industry, and their focus is regulation and technology. In this case, regulation goes along with technology. Title II of the Health Insurance Portability and Accountability Act (HIPAA), administrative simplification applies to dental benefit plans. Title I on HIPAA does not apply to stand-alone dental benefit plans. NADP lobbied for an exception to it based on the way the industry is structured. But Title II applies and it has three segments: privacy, security, and electronic data. Electronic data has changed the industry's focus on technology. For the next two years, this industry is going to be focusing on coming into compliance with the transaction code set, and identifier portions of the electronic data portion of administrative simplification. The target is October 16, 2002 for all but the very smallest dental benefit plans. The small plans have another year to comply, but you've got to have 50,000 lives or less to be in the small-plan categories of dental HMO.

The focus is on technology to meet the need for electronic data transfer. Actually, there's a group of plans that NADP got together at a CEO meeting and are working

on putting together a single portal or at least, an industry endorsed single portal to meet HIPAA requirements for electronic transactions.

This has such an impact on the market because it's probably going to increase administrative expenses for the market. The estimate for a medium-sized dental plan with 500,000 to 1,000,000 in enrollment, is $750,000 to $3,500,000 to come into compliance and this is just the transaction code set. This is not the privacy part that requires a privacy officer and all sorts of procedures and a retooling of the way your company handles information or the security regulations, which have been published, but are not finalized.

Dentists are also going to be focused on this, either through their own efforts or their practice management company, and they'll have a significant outlay as well, which may make them demand more money from the dental benefits industry itself.

There are several stages that the plans are going through, and, hopefully most plans have gotten through Stage 1 and Stage 2, because if you look at this overall, it's about a two- to three-year process to come into compliance, and if you're not fairly well along in the process, you're going to have difficulty meeting those timelines. A lot of the focus in the industry is going to be on technology and internal administrative processes at a time when there's a change in the economy and the market, which may demand that they focus outwardly.

MR. FLOYD R. MARTIN: I'm going to talk about similar things, but I want to qualify those as the things I looked at have been a subset of the market and a group of companies that I have been surveying for quite a few years. Therefore, the numbers are going to be a little bit different, but the change, I think, will repeat a lot of what Evelyn said.

The things I'm going to talk about are changes in dental cost, which I've measured through some surveys. I've had some recent group dental experience shift to fee discounts, administrative cost changes, employee cost changes, and the cost sharing between employee and employer. Then we can discuss some points on where we can go from here.

Regarding adult dental costs for the last 12 or 13 years, we started out with about $221 in '88, and that's increased to about $441 in 2001. In about a 12-year span, dental costs have doubled. The portion relating to the employee cost, this would be the deductibles, coinsurance, and maximums as a percent of the total, has actually decreased. The dollar amounts have increased, but the portion of the total that the employees are sharing has actually decreased.

In this chart, the top blue line is the change in the charge level from year to year that I've measured (Chart 1). The bottom green line is the change in utilization. These two charges have increased on a fluctuating basis, based on the information I've looked at. This is based on a fee schedule, usual, customary and reasonable information that I get from Ingenix, which tracks similar to the higher data. It hasn't

been a steady entry from one period to the next. It's been up and down, with a large increase around '95. What I've seen on the utilization is that for insured coverage it has actually been on a decreasing pattern. You see more years with decreases from one year to the next than you do with increases. Utilization has actually been slowly decreasing from one period to the next.

Then the center lines compare the medical, dental, and total combined premium increase (CPI) measurements. And the total CPI is the lowest. Medical started out higher in the early '90s, and then dropped down below dental in the later '90s. So dental has actually had a higher CPI change than medical for the last four or five years.

Looking at the child portion, costs went from about $300 to nearly $600, again, doubling over this same period of time. Within 12 years, the average charges for dental services have doubled. The out-of-pocket portion paid by the employee has decreased as a percentage, even though the absolute dollars have increased.

Annual child dental costs have followed a similar pattern to the adult, but utilization has jumped around and primarily again, decreasing from one year to the next. I think we've seen a steady decrease in utilization over the last 12 years.

Let me summarize some of the things that we just looked at. On an annual basis we have inflation of about 7% a year, while utilization has decreased about 1.5% a year. The net of those two is a 5.5% increase from one year to the next. That's based on the measurements that I have made. We looked at the dental CPI over a period of time, and it's very close to what I have measured, although my measurements have been not quite as flat as what the CPI shows. The dental CPI shows a 5.6% increase on an annual basis, while the medical CPI over the same period has only been 4.9% and then the total CPI is at 2.7%. Dental has outpaced both medical and total CPI over the last 10 years.

The employee out-of-pocket is for deductibles and co-insurance portion. Benefit plans have not, as Evelyn pointed out, changed that much over the last few years. The traditional co-insurance plans are the 100/80/50 plans with a $25 or $50 deductible. For the same plan, the adult's cost in 1988 for the employee was 46% of total cost. I thought the out-of-pocket cost would have increased, but actually it has decreased. When you look at the percent of benefits of the employees and at the fixed benefit plans, they are getting a better deal from one period to the next, both on adult and on the children.

Next we will look at the history of loss ratios. Again, this is based on the companies that I've surveyed over the last 10 years. Looking at total loss ratio experience, it's pretty flat. There was a peak around '95 where it almost reached 85%, and experience shows about 82% for '99. I'm gathering the '00 experience now. I don't have that available at this time, but overall, this was relatively flat with a peak in '95.

Community rated loss ratio is where individual group experience was taken into account, but all groups are charged the same rate. The percentages move around a little bit more with a peak in '95, and they've slowly been decreasing since then. In '95, we peaked out again at almost 75%, and in '99 we were running about 68%.This has shown a steady decrease since '95. We'll talk a little bit about what that represents in a few minutes.

Partially credible loss ratio is groups where experience is taken into account with some credibility adjustment. There are manual and experience ratings being used here. This is somewhat similar to the community rated, although the peak in this one is a year later in '96, but has been decreasing. I would say when you see a peak, this is the time when perhaps the group's experience was not taken into account as much as it should have, and there might have been more competition when we see these higher loss ratios.

The final one is the fully credible loss ratio. Again, it shows a peak in '95. And this is where the group's experience again was taken, and we were underestimating the trends for that period, or we were trying to be very competitive in the marketplace. I think you see that in '95 competition in the dental PPOs began to really get hot and the actual rates were very important. If you look in the charge level data, a few slides back, that was a time when I show a big peak in the average charge rate.

What does this represent? The total loss ratios are relatively flat. They range from 83-84%. Community rated would reflect a higher increase in '94 and '95, but they have been moderating, so I think the competitive pressure that we saw in the early to mid-'90s has dissipated some on dental. Companies are again being able to make the margins that they need for dental insurance pricing, and they have not been cutting back on those margins as drastically as they did in the early '90s.

Fully credible also had a spike and now has been relatively flat. The most volatile part has been the partially credible and it takes a longer time to correct the rates when you're using both credibility and manual costs. If the manual rates were understated, and you're not giving full credibility to the group's experience, it's going to take longer to get those adjustments through.

In '95, of those companies, only about 0.5% had dental HMO enrollment, 18% had PPO, and the balance was in indemnity plans. Moving to '99, only four years later, you can see the PPO has again exceeded the indemnity portion at 57.1%, which follows what Evelyn had shown a few years ago, and the dental HMO had increased almost on a fourfold basis to 1.6%.

In addition to this, the PPOs over the last couple of years have increased at about 200%. Voluntary plans have grown dramatically, too. In 1995, of these companies, only 5% of their business was considered to be voluntary. This is usually where the employee is required to pay the full premium or a substantial portion of the premium. And in '99, that had doubled to 11.3%. The voluntary portion is also doubled in just that five-year period.

This chart represents expense as a percent premium (Chart 2). I wasn't quite sure what the results were going to be until I put this together. I guess my intuition was that we had gotten better on the expense side of the premium. But when I put this together, ('95 is green and '99 is white) you can see that as a percent of the premium on all group sizes, the percent of expenses related to at premium have increased roughly two percentage points over that period of time. And I think this can really cause some problems when we are in states where we have to file on a loss ratio basis. It makes it harder to meet those loss ratio requirements. But it shows that basically the people costs are higher, the premiums are being affected by discount, so we don't have the full indemnity premiums that we had before. We have a bigger PPO mix. Our average premium is going down.

On the relationship between PPO rates and indemnity rates, we have more of the PPO rates and our total premium per member could be going down in some cases. Expenses are becoming a higher percentage because of that. We have more review, and more work is being done to keep the costs down. There's more review of claims and so, in total, technology has not at this time reduced our administration cost. Things that are going on in technology like the Internet and filing claims electronically, I think would have decreased our expenses, but they haven't. The expenses still have continued to go up as a percent of premium.

Towers Perrin produces an annual report of large companies that are their clients and they survey what their rate increases are going to be and what percentage the employee and employer are paying. This is a cost sharing based on what percent of the premium is the employee paying. From ’97 to ’99 the employer is pushing more of the expenses over to the employee. That's what I would expect. And then I started putting in '00, and '01 information, and it has gone completely the other way. The employee is actually paying less dental premium than he had in the past. Now this could be the company switching over to lower cost premiums, like PPO plans, where he may still pay the same amount as he did on a higher cost plan. Maybe it's the change in benefits and the employer is still paying as much dollar wise, but the balance is becoming less. This is an interesting result that I was not expecting.

Where do we go from here? In general, charges continue above medical and increase slightly, so even though they are low right now, the charge levels are probably increasing at about 4.5-5% a year as indicated by most companies when I surveyed them on what they were going to use for trends for next year. They’re using higher trends than they have in the past, and I think there is an anticipation that the charges are going to increase at an even higher rate than they have in the past.

Utilization, I think, will continue to go down slowly. I'm not quite sure if it's because people don't have time to go to the dentist, or people are being treated better, and they feel they can go longer without periodic checkups. But it appears that utilization is still going to continue to go down slowly. Network plans are going to grow, but not nearly at the rate that they have in the past. I think that they are going to be some modest increases in the number of network plans being offered.

Dental HMOs, as Evelyn pointed out, have reached their maximum market share at this time, and they've actually been losing some of the market share lately. Voluntary plans seem to be on a lot of people's minds. A lot of people are trying to find ways to get growth in that area, and yet provide a meaningful benefit at a reasonable cost. I'm sure a lot of your companies are looking in that area, and that's one area we can get to that other 45% of the market that is not currently covered by dental insurance.

I think also the retiree market is a big area where, as the baby boomers retire, that's becoming an area where I feel a lot of growth for dental in the near future. What we find out is those people, if they are actually retired, have a lot of time on their hands and they can definitely go see their dentists a lot. Those people may be very interested in dental insurance. I think that is a definite potential growth area.

Where do we go from here on plan design? Co-pays per visit are something I'm seeing a lot more of. Companies are moving away from the co-insurance and deductible and are moving to a co-pay approach by procedure codes. I see a lot of movement in the new treatments for gum disease on a medicated type of approach, as opposed to the physical treatments and things that are used now. I see a lot of movement in implants and cosmetics. Implants become a way to move around the more permanent approach versus the crowns and bridges that are the most common treatment for lost teeth now.

Diagnosis coding, this is coming up where there will be more of a diagnosis approach to looking at problems, as opposed to just coding procedures for treating problems. This may change the way that we pay benefits. We may move more toward a certain fee, depending on what the diagnoses are. Looking at the loss ratios, I think companies are right now are in a good cycle in dental insurance. They seem to be able to make their margins, so hopefully there's still a lot to smile about.

MR. EDWARD P. KIERNAN: My presentation is going to take a little bit different approach. I thought I'd talk about an area that, in my experience anyway, seems to be misunderstood. The other thing I'm going to offer up is really a tool that will give some of the math and stat people in the room something to chew on. A lot of the presentations don't generally do any kind of real calculation. It's pretty simple, but a little bit more application-oriented.

I'm going to talk about some basic terms and definitions, or at least how I define them. Some weighted averages will be the tool. Some of the relationships of percentiles, what I'll call the average allowed indices, and then what the impact of trend is on those measurements.

Here are some of the definitions, or at least my interpretation of the definitions. Reasonable and customary—that's typically the maximum fee that the carrier will approve. It's usually somewhere around the 80th to 90th percentile of fees. Sometimes carriers will also introduce that term of usual in there, and I guess that

means they've got some means to check the dentist to see whether what he's charging is the usual fee. The term UCR seems to come up a lot. A lot of carriers use that term. If there's a participating network, the dentist will absorb any of the difference with a usual fee, and that means that between what the carrier and the patient are going to pay, that's going to equal up the total approved fee amount.

You may also hear the term prevailing fee. In my understanding, it's typically something like the 50th percentile of fees. Some carriers might use that as their maximum payment amount for either in-panel or out of panel.

Then there are the preferred provider schedules, and typically they're designed to achieve something like a 10-25% discount off of your average submitted fee. My experience with them is that they typically represent somewhere around either the 10th to the 50th percentile of fees. There is a pretty wide range of how different carriers approach that PPO market.

What are the fee data sources? Typically they are from submitted claims. If they're a big enough carrier, they may be from the carrier's own data or they may purchase fee data from a company like Ingenix. Or some of the Delta plans work a lot with what we call pre-filed fees and that's when the doctor, if he signs an agreement with the carrier, is obligated to pre-file his fees. Any time he wants to change his fees, he’s got to file them. That gives some carriers an additional database to work with when they're analyzing dental fees. And again, those come from the network agreement.

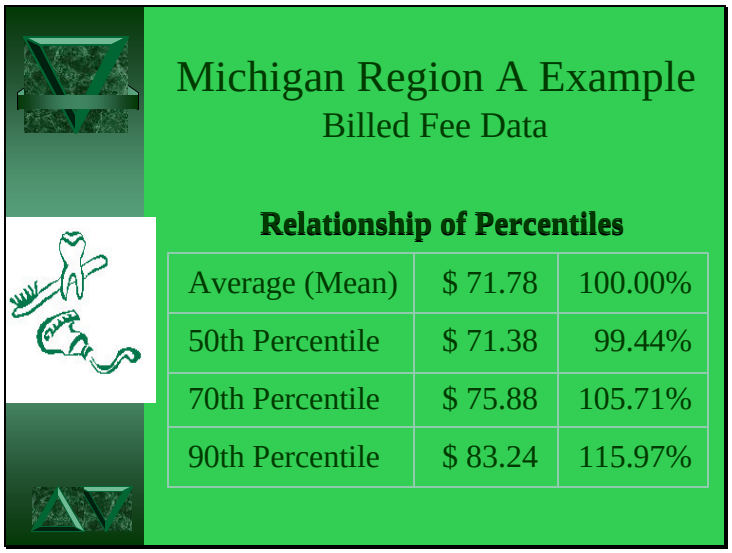
How do you work with data that involves hundreds of dental procedures? There are 300-400 different dental procedures. A lot of them don't get used very often, but there are that many.

Weighted average is an average dental fee. In my examples I've used 49 high frequency procedure codes, but they might be also high impact codes, so there will be things that heavily influence what the total dental costs are. The weighting is based on the frequency. What it does is reduce a dental fee schedule or a percentile or something to one number or an index. And it's similar to what a CPI index might do. You can use it for comparative purposes and that's the whole idea, because you don't want to be running around trying to compare 300 different dental procedures. Composite it down to one number and then you can make some valid comparisons between one measurement or another.

When I did my index, I just put down a few of the procedures that were within the 49 procedures that I use, but I have a recall exam and adult cleaning. The recall exam and the cleanings are very high frequency and that's to be expected. Preventive and diagnostic services are becoming pretty dominant in the dental plan. But you can also see that I included something like a porcelain crown, which is fairly low frequency, but high-dollar amount. Also, relative to the index, it has slightly more of an impact than the recall exam, even though it's significantly less frequently done.

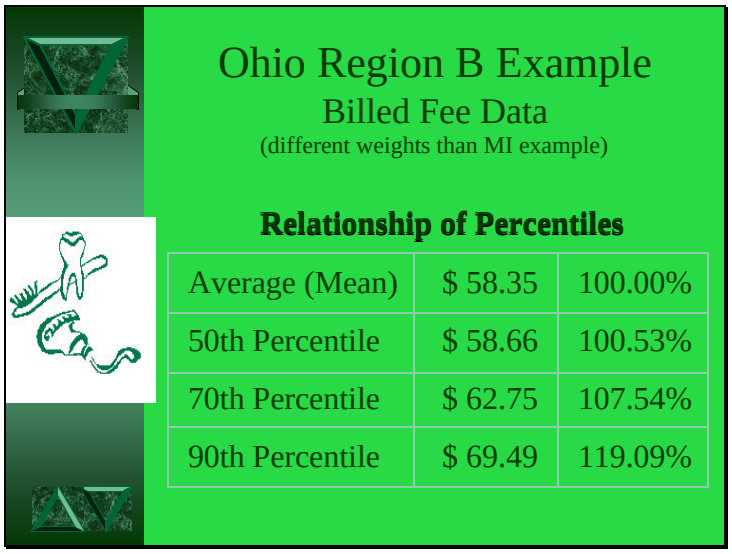
Here's an example of some relationships, and this happens to be a subset of some Michigan data (Table 1). As John said, I work with Delta Dental Plan of Michigan and we actually do also operate with Ohio and Indiana Delta Plans. I took a subset of our Michigan data and it's actually a kind of a region that is used for customary fee determination. You can see here that the average fee from the computation was $71.78. That means that weighted average of these 49 different dental procedures turned out, when you added them all up, was $71.78. The 50th percentile or the median fee was $71.38, you'd expect that, and that your 50th or your median would be pretty close to your mean fee. The 70th percentile was actually $75.88, so that means it was just under 6% higher than the average fee and the 90th percentile, a typical measurement that a lot of carriers use, was $83.24 and that was just under 16% higher than the near average fee.

Table 1



Using another subset of data, I took some subset from Ohio data, again, another regional section, and now I'll add that these are different weights than in the Michigan data (Table 2). I used actual frequencies based on the Ohio data that we had there. But you can see the mean pretty close to the median, or the 50th percentile. Seventieth percentile was, in this case, slightly higher than the mean, so it was about 7.5 % higher and then, the 90th percentile was a little over 19% higher. You can see this particular set of Ohio data had probably a little wider distribution than the Michigan data that we looked at before.

Table 2



What does that mean? It means if you've seen one fee distribution, you've seen one fee distribution. And that's really evident if you go and a lot of people do an analysis of even an entire state, and when you get into an analysis of an entire state, you're going to introduce a whole other bias into it, and you've got urban versus rural. So, you're going to see probably an even wider distribution. And sometimes carriers do that. They work with a statewide table, but you will see probably a wider distribution, or bigger relationship between the median or the mean versus some of the higher percentile ranges.

How do these percentiles affect what the average allowed fee is, or how is that going to effect what we're going to pay? We did a computation of what I call the average fee with a maximum allowed at whatever percentile you're going to designate it in. What I've done is a recomputation of this average fee, but any time the occurrence exceeds the percentile that you're trying to analyze, you would give that occurrence that percentile. If I'm doing analysis of the 70th percentile, let's say this mean with a maximum allowed at the 70th percentile, any time the frequency exceeds that 70th percentile, you would give it that percentile. Therefore, you're trying to replicate what you would pay, how you would do it, and the way you would see it, as in the claims adjudication side.

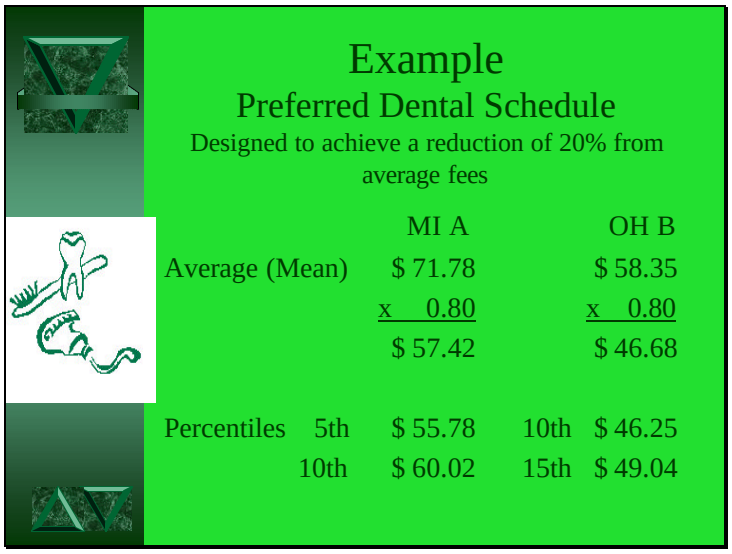
Back to my Michigan example. Again, the average fee was $71.78. Now, if I maximize the occurrences at the 50th percentile, my mean turns into $67.56 and that's 94.12% of the mean, which means you've got a reduction of a little less than 6%. At the 70th percentile, the mean turns into $69.29 and that's 96.53% of the mean, giving you a reduction of about 3.5%. When you get to the 90th percentile, you've got a reduction of about 1.4%.

I've duplicated the calculations now with that Ohio subset of data, and actually the numbers came out to be fairly similar there. You've got somewhere around a 6%

reduction when you maximize it, the 50th percentile. You get a 3.3% reduction at the 70th percentile and about 1.25% at the 90th percentile.

And we've been talking a little bit about PPOs or dental provider organizations (DPOs), so I just wanted to show you what happened with this 20% target discount that you might want to try to get on a PPO product. What happens there, I took my average or my means, and multiplied them by 0.8, trying to duplicate what my payment might be if I was going to try to get a 20% discount. In that case, the percentiles that came up were the 5th percentile in this data was $55.78 and the 10th percentile was $60.02. And then the Ohio was that number where I multiplied it by 0.8, fell somewhere between the 10th and the 15th percentile. What that really means is that there aren't a whole lot of dentists charging fees at those low discounted PPO tables. That makes it a little harder to recruit.

Table 3



How do dental fee trends now affect these distributions? What if there was a six-month period between the mid-point of the percentile calculation period and the table effective date? As an example, what if you got a 10-month window of submitted fee data that you were looking at to develop your data? You've got basically five months between the mid-point of that data, and the end of it through the period of that data that you're analyzing. If it took you one month to implement the table, basically load the table, put it into production or your claims processing you'd have about six months in between the average calculation date of the percentile you've got there and the date that you're going to start using that fee table or that percentile.

In another example, you're going to let this fee reimbursement table be used for an entire one-year period. In my example, it's the table based on a calculated 85th

percentile. I just assumed that dental fee trends would be 5%, which is pretty much along the lines of what Ray was talking about.

I calculated 85th percentile from the data was $80.85 and that was again, using my Michigan Group A data. If I divide by 1.025, (I'm trying to replicate that six-month aging), so I took one-half of a year's worth of trend, and if I divide by 1.025, I get $78.88. If I go back and take a look at what percentile is in that range, it's about the 80th percentile. What does that mean? It means, in this example, the 85th percentile actually became the 80th percentile, because when you aged it for just six months, you may say that you're using the 85th percentile, but based on the fee data that you've got, you're now using the 80th percentile.

Now we're going to let it age another 12 months, and we'll take that $78.88, divide that by 1.05 and see what kind of percentile I come up with there. In that case, I came up with somewhere in between the 70th percentile and the 65th percentile. That means, basically, that that 85th percentile that I calculated from this previous period of data will now age to somewhere between the 65th and the 70th percentile after 18 months. And that means now I'm expecting somewhere between 30-35% of the fees that are being submitted, I will be effecting those fees by the end of this, the life of this particular reimbursement table.

I wanted to see what happens if you look at some of those numbers. Going back to my Michigan data again, my mean is $71.78. Maybe the intended table was the 85th percentile where you would have gotten this 1.84% reduction. But by the time the table gets into effect, it's now dropped down to the 80th percentile, and I'm getting basically a 2.4% reduction. And by the time the table's life is over, we're now somewhere between the 70th and the 65th percentile and I'm somewhere in that 3.7 if I go in the middle, I'm right about at that 3.7% reduction. You can see there's a fair amount of change in how these tables can affect things.

In summary, what did we do? Well, we learned how to work with some weighted average indices. I compared some various percentiles. I demonstrated how these percentiles could affect your payments, and we looked at the erosion of the percentiles by the trend. And that's it. ''

MR. ROBERT M. SACKEL: In your presentation, you alluded to problems in signing up providers. I'm just curious about the type of providers who are interested in joining a PPO. For example, my dentist, who is more in an upscale market, has a good enough base, so that the dental benefits usually with a $1,000 or $1,200 maximum are not necessarily sufficient for him to cut a huge chunk into his costs. And he finds that it doesn't hurt his base. I'm just curious as to the acceptance of PPO. Do you have fewer able providers accepting the PPO? How does quality enter the mix?

MS. IRELAND: I guess we can all comment on that one. My comment, though, is based on secondhand information that the companies report to me. There are different factors other than just the provider being in a fairly well-to-do market, where they've got a new base. A lot of the companies report that if the employers

in the area are really offering a PPO or moving from indemnity and reimbursing at the PPO rate, that impacts the provider sign-up as well. Although there have been more and more comments that as providers are more satisfied with the base of their practice, they eliminate the managed-care plans, primarily first HMO, that they don't understand the reimbursement on a capitation basis. It's just not as intuitive for them. They eliminate those first and see the impact on their practice and then look at their PPOs. But more of them are staying in PPOs based on the information that we have on network retention. Though the retention rate in PPOs is actually a little bit higher than it is in HMOs.

MR. MARTIN: Yes, I guess I'll start off by saying that people are very loyal to their dentists. That's a fact. I think dentists are able to utilize that and that helps them resist some of these managed-care types of arrangements. I also think there's a very regional variance in that, and I think in the urban areas, where there's more of an over-supply of dentists, the managed-care situations or the managed-care agreements will be a little bit more attractive. You'll have a little bit better success in signing dentists when you get to the mid-sized cities. In rural areas it's very difficult to get docs because they're not plentiful and they know it. And that's going to be a real challenge for anybody trying to recruit panels in the future.

MS. IRELAND: The other thing that affects panel recruitment, and we didn't touch on it in any of our presentations, is the projected downward trend in overall dental manpower. We've got a 50-slide presentation just on dental manpower trends. The industry is very aware of that downturn and is trying a number of initiatives to increase the use of assistance in auxiliaries to try and maximize the time that is available in dental offices, until there can be some kind of turnaround in that manpower supply. That definitely has some impact, as I'm sure you're well aware.

MS. SUSAN E. PIERCE: I had a couple of questions. First, Ray, on the CPI, the average CPI dental change was 5.6. But the charge increase we're looking at is about 7.0. Now is that difference mainly due to the fact that the patient now is actually paying a smaller proportion of the total fees?

MR. MARTIN: The charges have increased at a faster rate, about 7%, but there's been a utilization offset, so I would say that the CPI, there's a probably a shift in the services that the people are getting to less expensive services and that has caused the CPI to show a lower rate.

MS. PIERCE: The other question is about the increase that we might be seeing in retiree coverage. would somebody comment on the Medicare risk-type plans? I believe now some of them are covering dental services as part of their premium and you're now hearing all kinds of things about cutbacks in those Medicare risk plans. I just wanted to know if you think that dental would be one of those cutbacks or if you think that will continue to increase?

MR. MARTIN: Yes, maybe Evelyn will comment more on this. With the Medicare people that's kind of an up and down thing. In the last few years a lot of those plans have disappeared that offered dental as a nice incentive to get people into

their plan. And as those plans have gotten out of the market, obviously that enrollment has dropped. I think that's why you see the decrease.

MS. IRELAND: Overall, in Medicaid and Medicare, the number of carriers that were offering that, we've seen decrease tremendously. When we first started tracking Medicaid, we had, I believe, 16 plans in Medicaid and now we only see seven or eight that are in that market at all. There's never been more than three-quarters of a million to a million in our database in terms of the Medicare products at all. It's not something that there's a lot of discussion on in the industry, but there are only a handful of carriers that are offering the product now.

MR. KIERNAN: I know we did a little bit of partnership with some HMOs and offered some kind of dental plan in conjunction with them, and the HMOs have run out of money. I don't think they can afford to pay us a whole lot for them, if there's not a whole lot of money left over. I think part of it will be some more voluntary types of plans where they'll give the retiree a chance to buy into the thing. I don't know if those have been particularly successful. They don't seem to get enough enrollment and they have horrible adverse selection issues. But they just probably will have to be some ways to try and work around those, because I think they're going to become more popular.

MS. PIERCE: One final question about the dental market in general. I haven't been working on dental for very long, so this has been a very informative session for me. But one of the things that has been in the news quite a bit in Massachusetts lately is these dental procedures that are related to a disease. Some child has cancer and needs to have reconstructive surgery, followed by braces, or whatever. And these things have been, in some accounts, denied as medical benefits. If you have a dental plan that's great, we'll cover you up to your $1,000 maximum, which is usually very inadequate for this kind of thing. I'm curious, in the market in general, are these types of benefits more likely paid out of a medical plan or do these really go back to a dental plan type thing?

MR. KIERNAN: I think the dental carriers are definitely trying to push them off to the medical care. And a lot of it has to do with they're just not the things that dentists routinely do. Again, the programs weren't really designed for them. Dental was designed as a dental assistance plan with $1,000, $1,200, and $600 max. They're really not designed for that. If it's the intention of the marketplace to try and push it that way, I think there's going to have to be some special riders and so forth. Because they're relatively low frequency things, but big dollar things, and there are some riders now being added on for certain things like this, the implant riders are coming along. A lot of it also has to do with what the group wants to do. ASO accounts may switch the stuff back and forth, and we've had some situations where it's an ASO account, but they decide who they want to pay for it and if they want us to pay for it, that's okay too, especially if it's an ASO arrangement. I think you might see more of that, but I think there's going to have to be some specially designed riders in the dental plans to accommodate them.

FROM THE FLOOR: I think most of the general public feels that if it's related to a disease or a birth defect, that type of thing, that it belongs in medical. That seems to be the perception out there, at least from what I read in the newspapers, that this should be covered as a medical benefit subject to those deductibles and co-insurances or co-pays or whatever.

MR. KIERNAN: And a lot of it has to be done in the hospital and it makes it sound even more like medical.

MS. IRELAND: That was going to be my follow-up point: Ed's exactly right. These are policies that were designed for really routine maintenance. One of the issues we've run into in the legislature a lot is the misunderstanding that if it's a dental procedure, it's under a dental benefit policy, but if it's a dental procedure in a hospital where you have emergency care and full mouth reconstruction, it's covered under medical. They're not covered under dental. And we address that issue a lot in the legislature. I'm not familiar with the particular example that you came up with, but because of the accident example, I would imagine the public would relate disease-related dental procedures to the medical policy and not the dental. It would take a redesign of the benefits. Maybe I'll add that to the questions that we're talking about redesign at our annual conference.

MR. KIERNAN: Yes, I'd concur with what's been said. Usually those are caused by the medication, their complications related to the treatments, and so forth. Again, they have to be done, usually those people are going to be treated in the hospital and I've always seen those related to medical and dental. Current dental plans are not going to come near to covering what's going to be needed. You often hear these dentists advertising for free exams and cancer screening, but you know if they find any cancer, they're not going to do anything about it. They're going to send you to the doctors.

FROM THE FLOOR: Eve, you mentioned that the HMO membership has peaked and is now declining a little bit, and that PPOs have grown instead steadily. Where do you see the exclusive provider organization (EPO) market falling?

MS. IRELAND: We don't track EPOs separately from HMO and PPO. We really have got it as a variation of the PPO market. It's going to be lumped in with that data. I'm going to use this as an opportunity, though, to take a little bit of issue with what Ray said about the HMO market peaking and not going anywhere. I have been on panels of executives that are members of our association. Some of them represent those of you that have stood up to ask questions, indicating that they believe a change in the economic trend is going to change the mix of benefits and that you're going to see PPO really having peaked. At one time, in the mid'90s, HMO was above 20% a year in growth and the PPO is going to begin to decline or at least level off, and HMOs are going to go back up. Now I don't know whether it will ever go above the peaks that it hit in the '95-'97 period, but I don't think that the growth will continually be down at HMO. I think it's going to go back the other way, as the market changes.

MR. MARTIN: I think, like Evelyn said on the dental HMOs, that they've been very regional. There's a certain mindset. People do develop a relationship with their dentist, as Ed said earlier, and become very loyal. They don't want to go in and be assigned whoever is there that day. If there is a change in the way people look at their dental services in other areas of the country, and especially in the middle part of the country, that you would need something pretty dramatic like that to get people moving towards dental HMOs in those areas.

MR. KIERNAN: Yes, I think a lot of the growth that's been seen in what they call PPO is really point-of-service and silent PPOs and things like that. Where people actually have access to PPO, but for the most part, I'd say probably 70-90% of them are still using the indemnity side or the reasonable and customary side of the plan. Does your dentist happen to be in the panel? If the dentist is, great. You use him. But in these point-of-service type arrangements, there hasn't been a whole lot of movement. At least I haven't seen any. I think the success of an EPO or even the HMO, will be better in the urban areas where there's still somewhat of an oversupply of docs. There's still more of these big practice kind of arrangements, and those arrangements are much more willing to take these discounted or lower fee reimbursements. And again, getting out of the urban areas is going to be a real challenge for provider recruitment in any kind of panel. I'll just add that I think the managed care or the HMOs growth is going to depend greatly on their ability to recruit docs and that's the question.

Chart 1

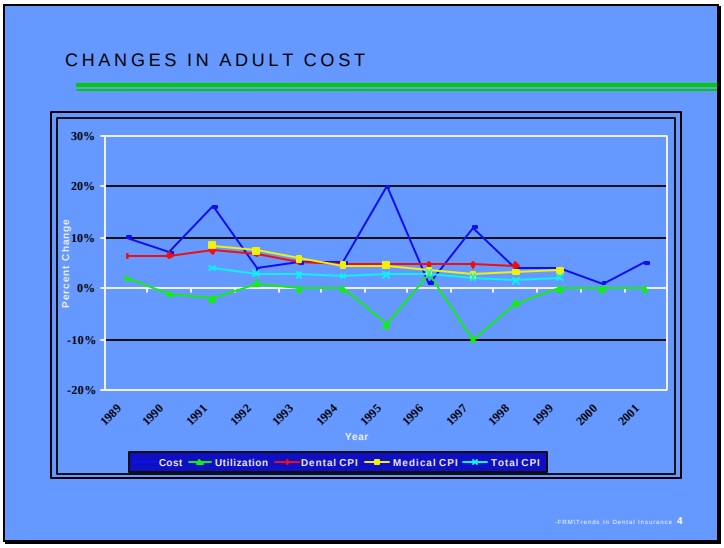


Chart 2