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Individual Disability Morbidity Trends

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Summary: This open forum begins with a presentation of the final report of the Society of Actuaries Individual Disability Experience Committee. This report encompasses claim incidence and termination rates based on a decade of industry experience. Committee members discuss possible implications of the report for future individual disability pricing and valuation work.

MR. ROBERT W. BEAL: This session is an update of the work that's coming out of the Society of Actuaries individual disability experience committee, which I'm the chair of. The two members with me are Doug Taylor from Mass Mutual, who will be talking about incidence trends and Paul Ziobrowski from Disability Management Services, who will be discussing termination trends.

I'd like to give you a quick overview of what has transpired since last year's meeting. In Vancouver, we showed some preliminary results. Since then, things have gone fairly slowly, but we have managed to get our data pretty well in shape for us to present a more in-depth analysis here. There were two outside contributors whose data seemed to be exceptionally good. We investigated and found out they were good results, so we ended up including them in our study. We also restricted our study to the 1990-99 period to avoid as much as possible the incurred but not reported issues, the open issues and the terminations.

We've included some new variables, which adds some excitement to our analysis.

For contract type, we looked at acts and sickness, as well as overhead expense by cell. Last year, we showed Florida, California and other regions. Now we can do it by more states. We're using geographic regions in addition to the California and Florida updates. For occupations, we can now show results by physicians, lawyers, chiropractors, et cetera. We also looked at termination results by broad diagnosis code groupings. We have analysis that shows differences by underwriting: normal underwriting, guaranteed standard issue (GSI) and guaranteed to issue (GTI). Lifetime indicator plays a big role in the results. Residual indicator indicates whether a policy has a residual benefit either in the base contract or as a rider, so we try to include that.

We spent a lot of time dealing with identification of settlements. We refined the approach that we developed last year for the preliminary results, and settlement was one issue that affects the termination experience. You can't treat a settlement as a termination; it distorts things. The other problem was that even though a lot of contributors identified settlements, by their own admission they said it wasn't that credible. So we had to come up with some kind of a methodology to identify what we would consider settlements in some arbitrary but consistent fashion. We adopted an X-ratio calculation on terminated claims, where we look at the ratio of total payments to date divided by the monthly indemnity, then we divide that by the number of months that it was on claim. It was a vanilla-type contract that ought to be 100 percent.

There are a lot of reasons it isn't 100 percent that have nothing to do with settlements, cost of living adjustment, residuals and things like that, but we tested it. We looked at claims and broke them out by various segments of X-ratios. We decided that if the X-ratio was greater than 150 percent and the numerator of the total payments divided by monthly indemnity was greater than 24 months, then we were going to call it a settlement whether it was or not. It acted enough like a settlement to be called one. If we said it was a settlement, then we did two things. First, we gave it exposure not just to when it terminated, but all the way up to the end of the study period or the end of the benefit period, whichever came first. And we didn't count it as a termination. Some people may argue that that is fairly conservative, but given the nature of what we're trying to do, I feel more comfortable with results like that.

We also did a lot of work in identifying expired benefits. In Vancouver, some of our results looked like there were some expired benefits being counted as terminations, so we set up some rules to put a corridor around the end of the benefit period. If the claim terminated within that corridor, we did not count it as a termination, even though it effectively was before the elimination period.

As we looked at this, there were a couple of important factors that we cannot study. Unfortunately, though we wanted to, we just couldn't get appropriate information by definition of disability. That may or may not be a big issue. We can't split terminations between death and recovery. We're going to have to somehow

take that into consideration as we go to develop tables, but we can't do that. The group people can, and ultimately we may be looking at what they have to help us interpret our results.

With that, I'm going to turn it over to Doug to talk about incident rate results and then Paul will talk about terminations.

MR. DOUGLAS W. TAYLOR: We compare incidence rates to the 1985 Commissioners Individual Disability Table A (CIDA) table, which was developed from experience in the late 1970s. The CIDA tables didn't do a good job in certain cells, because those types of business weren't being sold back in the '70s. We discovered that there were certain things that we had to throw out because they really distorted results.

Table 1 shows how we split things out by contract type over the study period. Accident and sickness is the major cell. You can see it got most of the exposure and most of the claims. Overhead expense and key person was much less, as was buy/sell and accident only. Chart 1 shows the results by contract type by calendar year. The buy/sell line bounces all over the place, so it was the first thing we threw out. When we looked at accident, sickness and the total, we saw the same general pattern as before. The results were around 100 percent when we started the study period. Then there was a little pick up in 1993 and 1994, which was about the time the industry was seeing deterioration, particularly in the physician market. Since then, with the impact of all the risk management changes that have taken place over time, there was gradual improvement from 1995 to 1999 or so.

Table 1

Average A/E Incidence 1990-1999
Contract Type - By Indemnity

Contract Type	Average A/E	Exposure %	Claims %
Acc & Sck	101.7%	88.7%	81.6%
OE & KP	73.6%	12.9%	18.3%
Buy-Sell	95.5%	0.4%	0.0%
Acc Only	64.5%	0.0%	0.0%
Total		100%	100%

From here on, we're going to concentrate on accident and sickness. Table 2 looks at accident and sickness by elimination period. This is where the first CIDA hole appears. It's a 90-day table. CIDA uses 0, 7, 14, 30, 90 days. For the periods in between, we took that table and went out X number of days to bring in the expected. The CIDA table obviously didn't do a good job with 90-day elimination periods. Back in the 1970s, not a lot of 90-day products were sold. CIDA might have been somewhat of a guess by then. Most of the business sold back then was 30 days or lower.

Table 2

Average A/E Incidence 1990-1999
Accident & Sickness Only
Elimination Period - By Indemnity

Elimination Period	Average A/E	Exposure %	Claims %
< 30 Days	85%	1%	5%
30 Days	94%	9%	29%
60 Days	73%	12%	16%
90 Days	129%	61%	44%
180+ Days	106%	17%	6%
Total	102%	100%	100%

Chart 2 shows trends by calendar year. Except for the less than 30-day business—I don't think anybody's still doing that—there is nearly the same pattern as before for the accident and sickness type. There is some pick up in 1993 to 1994 and 1995, but gradual improvement since then across all elimination periods. You can see the problem that I mentioned with the CIDA table before 90 days—it sticks out relative to everything else.

Then we'll go to Occupation Class. Here's another place where the CIDA table seems to have been deficient. Class 1 in the CIDA table is 3A, 4A, 5A and 6A, whatever people were selling. These days, our Classes 2, 3 and 4 refer to the blue-collar classes. Because of the contributors we had, most of the business was in the white-collar cell. A/E ratios are pretty low in these segments as well. As we were investigating, we often had to split our Class 1 out versus blue-collar classes so we could get a better read on things. Chart 3 shows more trends resulting in a different picture. Everything seemed to kick up a little, but has improved gradually since then. Maybe there is not as much variability in these occupations, but everybody tends to blame physicians for the uptick in experience.

Table 3 looks at issue year groups. This seems to reflect all the risk management actions that have taken place over the year: improved underwriting, improved pricing, improved product and claims management. It's flat here is because this kicks into that 1993-95 calendar year period where there is some deterioration in

morbidity. Regarding the trends for issue year groups, you can see a little of the underwriting selection that's going on. In 1990-92, it kicked up for a few years, then flattened out, and then came back down. From 1993-95, the same thing happened—it kicked up and came back down. Issue year 1996-plus haven't really kicked up yet. It probably hasn't had time for a lot of its business to get into the third duration. But it is considerably lower for this block of business than for everything issued prior to that. It's almost as if somebody flicked on the switch in 1996 and everything got better.

Table 3

Average A/E Incidence 1990-1999
Accident & Sickness Only
By Issue Year Groups - By Indemnity

Issue Year	Average A/E	Exposure %	Claims %
Pre-1990	104.2%	46%	63%
1990–1992	102.4%	28%	23%
1993-1995	97.4%	19%	11%
1996+	70.5%	7%	3%
Total	101.7%	100%	100%

FROM THE FLOOR: How long of a selection period are you seeing in the numbers?

MR. TAYLOR: Probably five years or so.

Multi-life versus individual—now here's where the shocker comes in. Everybody thinks multi-life performs a lot better than individual. When you look at it on the surface, it doesn't. But as I mentioned before, there are a lot of cells that distort things, whether it's a Class 1 or a 90-day or other things like lifetime benefits or the underwriting. When the individual and multi-life are split out by issue year group, my guess is that multi-life business written back in those days was of a different nature than it is today. I think back to my youth at Paul Revere, and it seems like multi-life business back then was mostly in a physician-type group or maybe high indemnity. So maybe it's not surprising that multi-life was higher and then started to turn around to the point where we now have seemingly much better experience than the multi-life block. We have been trying to find the point where multi-life and

individual really fit against one another. What we generally found is that when you remove the interference, the multi-life business does perform better in at least the first five durations, but it seems to catch up. When you break it down enough, if you pull out certain underwriting types, if you pull out lifetime benefits, it doesn't cross over the line at all. It seemed to be a little below. But a word of caution: if you're expecting 15 percent better morbidity for multi-life forever, it may not happen. The discounts are partly paid for out of morbidity, but once you get beyond 15 percent, I think the discounts are paid for out of lower commissions. We're seeing distortions by things like lifetime benefits. Our Class 1 has a higher A/E ratio than everything else; the 90-day has a higher A/E than everything else. We have to split that all apart and then be able to compare by duration to see what's going on. Once you strip away the distortions, multi-life does perform better than individual, but the question in our minds is how long does that last?

It's no surprise that California and Florida have much higher incidence than the rest of the country. Last year they were closer together than what we're now seeing. Regarding the trends, California seems to have pretty marked improvement over the time period once it gets by the spike up in experience in the early 1990s. Florida still seems to be bouncing around. It's improved over the last few years, but there seem to be a couple of high peaks in the experience that we need to look at further. The rest of the benefit block seems to have been pretty flat and slightly improving ever since, but California and Florida definitely stick out.

We now have the ability to look by region. Of course, we have to do it with and without California and Florida, because they can distort things. Maybe it's just that we've never seen regional results before, but it was surprising to see, for example, the Northeast had higher incidence than everybody else. The Midwest was much lower. You can see the impact that California has on the Western region. Oregon, Washington and Alaska performed well. The Southeast is driven by Florida. Taking out California and Florida narrows the differences, but there were still some. We're surprised at how some of this works. We split it out by blue-collar, split it out by policy duration, and there still seem to be differences, so it's surprising to us.

Now we'll look at the underwriting details. This includes issue year and policy year, so we've taken the study year out of this. Across the board, for years one through three morbidity gets a little worse, spikes up in year three when the contestability period ends, stays up there for a little while, but actually improves after that point in time. It's almost as though there's a select period of the first three years and the last five.

Let's talk about attained age and EP by indemnity. This is another example pointing out that the 90-day table wasn't very good for CIDA. You see A/E ratios particularly in the 30-50 range that are well above the CIDA tables for males. Females show quite a different pattern, spiking up more in the 30-39 group. Again, it could have been the way the CIDA tables were built based on experience in the 1970s, which is a different business than what we've seen since. We have taken a look at the raw

incidence rates of males versus females by EP and by issue age range. A graph would show female to male ratios decrease over time, but they don't cross below 100 percent until about age 60. So female incidence rates are higher when you break it down just about everywhere, which is no surprise.

Regarding details by occupation, these are the A/E ratios for the entire period. The usual suspects stick out—physicians, dentists, chiropractors are a little high, insurance salesmen too, podiatrists in the medical field, stockbrokers, nurses in the medical field. This isn't female-driven though; both male and female nurses have pretty high A/E ratios. We looked to see if there are occupation class differences. For example, teachers look good, but they look good in both white-collar and blue-collar. There wasn't a lot of surprise there.

If you were to take a few of the occupations and look at their patterns over the last few years, chiropractors blow the size of the graph. The bad news is that their A/E ratios are almost three times what the CIDA table says. The good news is that they've improved down to 150 percent. Maybe if you take the trend out a few more years, they might actually get to 100 percent. With all the actions being taken over the years, physicians surprisingly don't show a good improvement pattern until late in the study. They're actually flat throughout the period. Dentists were high, but it looks like action is being taken there. Working executives are improving. Lawyers appear to be the best of the lot.

The part of our study that distorts things is the presence of lifetime benefits. Table 4 goes across all elimination periods. We included policies that don't have any cost of living adjustments (COLA) or lifetime benefits compared to policies that do have COLA or lifetime benefits. We weren't able to split out COLAs between the high maximums that used to be granted in the early 1990s and late 1980s. I've seen plans that guarantee 7 percent per year increases. Today they offer 3 percent. Just adding lifetime benefits drives things up quite a bit. When you put the combination of COLA and lifetime together, that's the worst situation. This is probably a situation of the more bells and whistles you add, the higher the A/E ratio is going to go. We did look at COLA by issue year, and the gaps narrow if you ignore the lifetime benefits, so I think that's a reflection of the lower COLA increases in the newer plans.

Table 4

Average A/E Incidence 1990-1999
Accident & Sickness Only
BP = TXX & Lifetime
Occ Class 1 – By Indemnity

Elimination Period	No COLA / No Lft	COLA / No LFT	No COLA / Lft	COLA / Lft
<30	86.4%	42.6%	99.4%	83.5%
30	107.3%	100.8%	122.8%	132.6%
60	70.2%	77.7%	95.0%	100.5%
90	125.8%	124.7%	170.7%	189.9%
180+	101.5%	94.9%	159.9%	162.4%
Total	106.2%	106.9%	133.2%	152.1%

We looked at policies that include total disability only versus those that have a residual benefit. The results bounce around, which tells me there's not a whole lot of difference between whether you get total disability or total and residual, at least from an incidence point of view, but we did look. We also looked by underwriting type: guaranteed issue options (GIO), otherwise known as policies that are a result of future income options, guaranteed standard issue (GSI), guaranteed to issue (GTI) and normal underwriting. Underwriting seems to be one of the drivers of the multi-life/individual anomalies. If you just had normal underwriting, the multi-life business does have better experience than the individual. We suspected that GIO was bad, but didn't realize there was that big a difference in multi-life and individual.

MR. TAYLOR: There were other underwriting types here that we didn't include because there was hardly anything there. Unfortunately, we don't have employer pay versus employee pay split. That would have been a good thing to see with the multi-life, particularly in light of comments about the voluntary business. Chart 4 shows the graph by policy of the different underwriting types. In the GIO line, you can see people buy it and use it in the first couple of years, and it takes many years before that experience comes back to normal. The other underwriting types tend to have more of a normal selection in the first couple of years. So we see that GIO is one of the drivers of the multi-life individual anomaly that I mentioned earlier.

We still don't have good conclusions for smoker and nonsmoker. We're seeing

smoker and nonsmoker close together, and unknown is off on another planet, so we don't trust those results yet. We're still looking at those. That's everything that we covered last year. We know a lot more than we did last year, but we still have a ways to go, as you can tell.

MR. PAUL G. ZIOBROWSKI: I am going to discuss results by termination rates from our study. We're looking at actual/expected termination rates versus CIDA by duration. Chart 5 is separated out by contract type. If you look first at the accident and sickness (A&S) line, in the early durations it's considerably lower than CIDA. The average first year is about 45 percent of CIDA. As time goes on, the claim gets closer and closer to 100 percent. At quarter seven, it reaches 100 percent or goes a little over, stays there through year three and then starts heading back down. It finishes up at about 92 percent at year six-plus. The overhead expense (OE) and key person (KP) line is lower than the A&S line for about three months, then it goes considerably higher. It shows quite a spike in quarter seven and quarter eight. We did attempt to screen out any benefit expiries by not counting any terminations that happened within three months of the end of the benefit period, but I wonder if a couple snuck in there. There is also this precipitous drop after two years on the OE & KP , which only means there's no data, so zero A/Es were entered into the graph. It doesn't mean experience is unfavorable.

Now we're only looking at the accident and sickness DI. We looked at the trend across the study period by onset groupings for the actual/expected versus CIDA, also by duration of claim. All the onset year groupings have similar patterns versus CIDA. The lines are close together, showing similar experience. I'd say the 1992 and prior onsets had a little better experience than 1993 and later, and the 1996-plus onsets were a little better than 1993 and 1995, but not dramatically. I personally expected to see more improvement in the 1996-plus onsets, because I know many companies invested a lot in their claims department during that time. They might be seeing some improvement from that investment on the incidence side through low approval rates, but it's not dramatic on this line.

When talking about details by gender, females demonstrated higher A/Es than males for all durations. That's true even if you take out the pregnancy claims. Looking at claims of durations of 11-plus years—this is the ultimate period—on the CIDA table, it is broken out by attained age groups and by gender. I'm hoping this will be useful, because I think a lot of companies don't have enough data to look at their own experience. Even in this study, which included about 172,000 claim closures, some cells are still pretty sparse: the 30-39 age group, the 65-plus age group and females in general. There's not a lot of data there, but nonetheless you pick up a fairly clear trend. The slope of termination rates by attained age appears to be considerably different than what's in CIDA. At the earlier ages, A/E is well above 100 percent. By age 60, they're well below 100 percent, and it looks like it keeps dropping. The mortality table that CIDA was based on is probably pretty outdated now and may not be appropriate to use without modification. If you've got a lot of lifetime benefits on your books, that makes a difference.

We also looked at results by CIDA occupation class. These are the CIDA occupation classes with the highest occupation class. Occupation class 1 would typically encompass the three highest underwriting classes for direct rider. This shows that the higher the occupation class, the lower the actual/expected. There are some other differences in the contracts and things like that, but that's the general result. Next we looked at it by benefit period. The longer the benefit period, the lower the actual/expected claim termination rates. It was no surprise that the shorter benefit periods—the "other" line for two year, five year, and the like—were considerably better than the others. But I was a little surprised that the lifetime was so much lower than the line for to age 65. There's a difference right from the very start of the claim. It gets a little bigger as time goes on. That was interesting, so we took a closer look. It may be because a lot of lifetime has COLA on it.

We looked at only Occupation Class 1 to age 65, a longer benefit period, at the presence of lifetime and/or COLA benefits. This shows that contracts with either COLA or lifetime have lower termination rates than those without, and contracts with both COLA and lifetime have very low A/Es, similar to what we saw on the incidence side. But maybe lifetime is bad because so many physicians have lifetime. Again, to age 65 or longer on Occupation Class 1, we separated physicians from non-physicians and looked at the presence of lifetime benefits for that. For both physicians and non-physicians, the actual/expected is lower if lifetime benefits were present. We also see that for both non-lifetime and lifetime contracts, physicians have lower termination rates than non-physicians.

When we looked at residual versus non-residual contracts, we were just looking for the presence of residual in the contract, not whether any benefits were paid under residual. We also make no adjustment for partial payments under residual. You're either terminated or you're not, so if you're receiving partial payment, you're still on claim. This shows that residual has slightly lower termination rates up till about quarter seven, then they look very similar. When I started out, I expected to see a bigger impact on terminations from residual, but it is not that much. It's certainly nothing like what we saw with COLA, lifetime and physicians. We also looked at it by key states and by region. As we saw in incidence, the things that popped out as significant were California and Florida. California shows lower termination rates till about quarter six and after that it looks pretty normal. Florida shows very low A/Es throughout all durations. If you combine that with the incidence information, it's not a pretty picture.

Looking at diagnoses by claim: back, musculoskeletal, mental/nervous, alcohol and drugs (AD). Mental/nervous t has extremely low termination rates early in the claim, but after about year four it's higher than average by a good margin. The alcohol and drug line also begins on the lower end, catches up to normal by about fourth quarter, and then after two years it's higher than normal.

Continuing with neurological disorders, cancers and immune disorders, we had to not include pregnancy because the A/E was very, very high on that and it squished

all the other lines together because it distorted the scale. Cancer has pretty low termination rates for about six months, and then by quarter four it catches up and gets very high termination rates, probably due to the mortality. Neurological disorders had very low termination rates for all durations. That was the lowest of any of the causes we looked at.

As seen with incidence, we were surprised by the multi-life versus single life. Multi-life showed lower actual/expected termination rates for all claim durations. There are some factors that could contribute to this. I guess I don't know what I expected to see on the termination side. I know I expected better incidence on multi-life. I think a lot of what we're picking up as multi-life is your discount with three to five policies. Multi-life has more physicians, more Occupation Class 1, more COLA, more males, more lifetime, all the things that hurt termination rates. So far I haven't found one where multi-life is better. That's an area we're still looking at.

For termination rates, I looked at some key occupations: physicians, dentists, chiropractors, executives and lawyers. What you see is a split between medical and nonmedical. On the medical side, dentists behave normally for about a year and then their A/E goes lower than normal, so they fooled us for a little while. The dentists and chiropractors have very low A/Es for all durations. The executives and lawyers—the non-medicals—both perform quite well in the A/Es. I wasn't surprised at all by the executives' experience, but after talking to our claims department, I thought lawyers were going to have the worst termination rates on anything out there. But I guess, at least in our claims department, they're getting a bum rap. So that's what I have to show on the termination rates. I know there were a few surprises in there for me. And now I'll turn it back over to Bob.

MR. BEAL: I want to go over a few things in terms of where we are going with this data and what we hope to produce. I won't put a timeframe around it because I'm lousy with that. So what are we going to do with this data? We're fairly comfortable with it. There may be a little more tweaking we have to do, but in general we feel as though we've captured the data as well as we can, and we're going to put together the comprehensive report on trends during the 1990s. That will summarize not just what's here, though the comprehensive has allowed us to drill down. It could be a fairly lengthy report, but I wanted to capture, as much as I can, the key trends that went on during the 1990s.

The incidence tables will be the ultimate tables based upon policy years six and later. Then we could provide you selective adjustments to go up to that table. We can also provide adjustments based upon our data—multi-life versus single life, occupational information, et cetera—whatever will add extra dimensions to these experience tables, versus just giving you something that's in the same structure as the '85 CIDA tables.

From that experience table, I'd like to look at developing a possible valuation table. We'll develop a valuation table with some margins that we feel comfortable with,

something we would test looking at the various impact on reserves, active life and claim reserves, and then send it along to the NAIC and see whether they are interested. The period of time of the 1990s is a very good period one. We've seen some good results, some poor results, some general trends. It's a good average experience. It would be a suitable basis for a valuation table, albeit with some loadings maybe added into that.

Although the issue hasn't been raised recently, at a committee meeting it was asked if we should be getting more data and more recent data. This stuff seems to take forever. But we've learned a lot and hopefully can get on the road and not take as long to put these things together. We started from scratch in terms of developing specifications, methods of getting the data, what to look for, et cetera. I personally would like to see more data, but I'm not sure. I don't want that to slow down the development of some tables that would be useful, but we'll have to see. It is an issue.

So that's our presentation. There are certain constraints in preparing the tables, so we can't have every variable in there. For instance, right now for incidence we have five pivot tables with different combinations. We may go back and ask them for a few other ways. For instance, a new table we may want to have is by occupation and multi-life/single life to see how that dynamic is working. We'll probably go back to get that and put those results in our report. It is fascinating, and hopefully we'll get some worthwhile results for everyone to look at. Are there any questions?

MS. BRENDA WOLFERSBERGER: What's your timeframe for publishing this data? Is any of this data available for us to play with on our own and do our own tables?

MR. BEAL: That's a good question that has been raised. Would pivot tables be available for the industry? I'm not sure, actually. There should be a certain amount of control. You can cut stuff way down until the point where you don't have credible results. Someone may use the data and say it is based upon the Society of Actuaries, and these are the results. But the SOA's committee may not have published that because it wasn't credible. So there' may be a control issue there.

For the timeframe, the committee is putting together all the data drawn down into writing a report. I would really like to get that report out by the end of the summer to have these results out there. Concurrently, they are trying to develop an experience table. That may be ready in the fall. That's my goal. Things got slowed down during last year for a variety of reasons. We really had to hustle just to get these out, but we did get some good results.

FROM THE FLOOR: Bob, you mentioned the two outlier companies early on. Was all that information you presented inclusive of those two companies?

MR. BEAL: Yes, it did include the outlier companies. After investigating further, we felt what they had was good data. It just happened that their experience was

better, it had lower A/E ratios than a lot of the companies. Part of it was the different markets they were in, but it appeared to be justified. Some of the trend data changed a little bit from what we had before. One of the reasons is that we zeroed in on the accident and sickness, whereas before we couldn't break out by contract, so we had buy-sell in there. Even if you think that there isn't that much buy-sell, it makes a difference if you're measuring things like monthly indemnity and you're off by a factor of 10 in terms of the exposure. That could distort things more than it should have. But in general, I think our results were consistent with last year's in most respects.

FROM THE FLOOR: The benefit waiting versus count waiting is one of things we're looking at for the group table. Did you guys take a look at that?

MR. TAYLOR: Yes, we did, and the comprehensive report will look at count versus monthly indemnity. What we see in general is by incidence, monthly the A/E by MI was often 15-20 percent. It had ratios higher than by count. What's interesting is when you look at business that's been issued since 1996 and later, that actually turned around the A/E ratios by indemnity. They were lower than by count pretty much across the board.

MR. DUANE HARRIS: I'm going to demonstrate my ignorance of the individual product. Being a group actuary, I'm not that familiar with it. The multi-life versus the single life went a little bit counter to what I might have expected. It's probably my ignorance of the product. My impression was that multi-life policies had a little more relaxed underwriting than single life policies, yet they show better incidence.

MR. TAYLOR: The multi-life in total—that's one of the issues we were dealing with—actually had a little higher A/E ratios than the single life. What you're saying is there's a very high percentage of the multi-life in the markets where hey have normal underwriting. We walk away from this thinking that multi-life is not as good As single life. There is an assumption out there that multi-life has much better morbidity. Our results are showing that, just because it's called multi-life or you're in that market, if you're not careful in terms of your product design, meaning elimination period, benefit period, then you're not going to get that better experience in multi-life that you might be reflecting in your premium rates. We've been trying to hustle and trying to say where it is. For instance, I came to the conclusion that if you look at the business that was issued in the1990s, with white collar, elimination periods of 90 days or longer, without lifetime benefits, if you break it out, it's still fairly large. And then we're seeing, at least for the first five years, substantial material, more favorable experience for the multi-life, even in spite of what you call the relaxed underwriting that is going on.

FROM THE FLOOR: On the termination rates for mental/nervous and alcohol and drugs, you see a big jump in the A/E around the two-year point. Do you think that might be connected to people who also have a group policy where the benefits are limited to two years and that you're benefitting from those benefits being

terminated?

MR. TAYLOR: That could be. I hadn't thought about that, but that's a very good connection.

FROM THE FLOOR: On Florida, it doesn't go completely against what I would have expected, but I didn't realize Florida was that much worse both from an incidence and a termination standpoint. Is there a theory as to why that would be?

MR. BEAL: I believe our states are based upon state of issue, not state of residence, in other words, where the policies were issued. They may or may not be in Florida. Probably a great majority of them are in Florida. What they have in common is the fact that they were issued in Florida.

MR. DAN SKWIRE: I'm from Milliman. I have a couple of questions and comments on some of the multi-life results that you were talking about. When you talk about the results by underwriting type and splits it out by multi-life and single life, maybe that tells a lot of the difference in the results between multi-life and single life that you saw overall. Really the only segment where the multi-life is a lot worse or is worse at all is the guaranteed issue option.

MR. BEAL: I don't have the numbers here, but keep in mind that's a small segment.

MR. SKWIRE: My question is how much exposure there was in that and whether that was enough to have a material impact on the overall multi-life versus single-life comparison. Everywhere else, it seems like it's doing better. That's a very specialized segment of business. It's like convergent business in a sense. So it's not surprising that you could see some strange results in there. Otherwise, whether it's guaranteed issue or whether it's normal underwriting, you're seeing a lot better experience on the multi-life.

MR. BEAL: The one thing that's missing here is the category called "other," which includes everything, because it's from the contributors who couldn't break the data down into underwriting categories. When we compare the multi-life and the single life in the scale of things, you have the "other" in there as well, so that may be producing contrary results. It's a fairly large segment.

MR. SKWIRE: I was a little surprised by the results on the termination rates between multi-life and single life. I can think of a lot of reasons why the underlying populations might be different, that you've got a different proportion of positions or lifetime benefits or COLA as you said. I suspect that could be a lot of the answer. I was just curious whether the committee had any thoughts other than these population issues. Is there any qualitative reason you can think of why claim termination rates on multi-life would be different than single life? I was having trouble coming up with anything.

MR. TAYLOR: Could it be the possibility that if employers want to they could be LTD plans as well? I think on a lot of the plans, if you look at the issue and participation limits out there, you can sell a lot more coverage to someone with LTD. Maybe that's potentially producing higher replacement ratios and therefore lower termination experience. I don't know how reliable that is.

MS. WOLFERSBERGER: I had a question on the incidence by issue year and policy year. It really does appear that the select period may be only about three years. Is that surprising to anyone that it's that short or is that what people expect?

MR. ZIOBROWSKI: I think the contestability period has an impact, because once you're into the third duration, people have been waiting for claims.

MR. BEAL: I have been assuming it would be about five years. That's what I'm going to assume if we put together an ultimate experience table, although it may have a funny pattern where years four and five in certain situations are going to be higher than the ultimate. It'll start out low and then go up in years three, four and five, probably a lot has got to do with coming out of that contestable period. Mostly if there's abuse there, it shows up in the third year, but it can go into the fourth year, maybe a little in the fifth year. There may be other factors driving it too. During that period of time, we had some dynamics like the physician business hitting. That may be causing those distortions in year four to five. That's something we have to flesh out. We had looked at smoker and nonsmoker, and I suspect we'll have something in the report on that, but they're showing that there was no verifiable difference in our data between smoker and nonsmoker incidence. And it could be a variety of reasons. A lot of the claims attributed to musculoskeletal may not have a smoker, nonsmoker split. The smoking may not have been factor in that, but you would think it would have some effect on recoveries, and you'd expect to have higher cancer.

MR. TAYLOR: Cardiovascular, too.

MR. BEAL: You would think there would be those things, but we're just not seeing it in total.

MR. PAUL MORRISON: You were mentioning that eventually we want to replace the CIDA tables with something new. Do we see that CIDA is so irrelevant that we're going to throw it out and start over again, or is this new table just going to be a modification of CIDA?

MR. BEAL: I think we will probably develop a new table. It will be rates, not A/E ratios ultimately. For instance, for graduation purposes, we may graduate A/E ratios, develop A/E ratios by quinquennial years versus 10-year groupings, and then graduate those and take those graduated A/E ratios and apply them to the '85 CIDA table.

MR. MORRISON: If we're going to develop something that is significantly based on the data rather than CIDA, are we going to be changing the structure of the table at all? Obviously, seven- and 14-day elimination periods are almost irrelevant now. Are we going to be changing the structure of the table, getting away from the two causes, getting away from the parameters, and introducing the new ones that we're seeing—does the COLA exist, does the residual exist, those kinds of things?

MR. TAYLOR: I'm not sure what the structure will look like, but it will be different than CIDA. We're not going to try to stick to the CIDA format, because though that was fine back in the 1970s, it's not fine based on the 1990s. Your comment about the 07 and the like, remember these will be valuation tables. So even though we don't issue that stuff any more, we still have to worry about calculating reserves. As you saw in the under 30-day EP cell, we still have to try to figure that in somehow.

MR. BEAL: If we come up with a new table for active life reserves, say it was promulgated by the NAIC, it would be for new business. But I think because it's a fairly new table and hopefully has some credibility to it, companies may want to use it as a basis for doing all those valuations. Then you have to take these things into consideration, apply them to the older policies as well if you use our tables. How much is the final structure going to change? I hope we try to keep those changes to a minimum, so software companies or even insurance companies aren't doing major overhauls to the valuation systems to accommodate a new table. It may be a basic set of tables, for instance incidence based upon ultimate, with some suggested modifications to that when you use it for valuation purposes. If we have a credible select and ultimate pattern, that may be what you can use for guaranteed renewable business where the valuation laws allow you to have that and reflect selected ultimate rates. Other adjustments as well will be in there. The termination experience may be where we consolidate all the benefit periods—to age 65 and life-time—but with suggested modifications that companies may use for the lifetime benefits.

FROM THE FLOOR: Are you going to create new occupation classes?

MR. BEAL: I don't think we have the data to do new occupation classes.

FROM THE FLOOR: If you captured 3A, 4A, 5A, it would be nice to split it that way if we have it, particularly for incidence. We just haven't got to that or I can't remember if we asked for it.

MR. BEAL: That may be possible. I think that may be more likely than be able to split out the Occupation Class 1 into those others. We did ask companies to give us their occupation class data, and we also asked companies to tell us how they map them to the '85 CIDA. The problem with something like the 3A, 4A, 5A is that companies have moved their occupations around during the 1990s. Certain occupations—dentists, chiropractors, whatever—have moved from 5A, now they're

3A or 2A. That's reflected, and we can't capture that. It might be that we can have one for physicians/surgeons or medical, specialized in addition to the '85 CIDA one, two, three, four. That may be very likely.

MR. TAYLOR: It may well be that. For example, physician incidence rates are the same regardless of what class they're put in. So we'll have to look at that.

MR. BEAL: Some of those occupation groups like executives might cut across several CIDA occupation classes. It would be interesting to see if the underlying experience or raw incidence rates do vary, or whether just everyone who is an insurance salesman should be within a certain group.
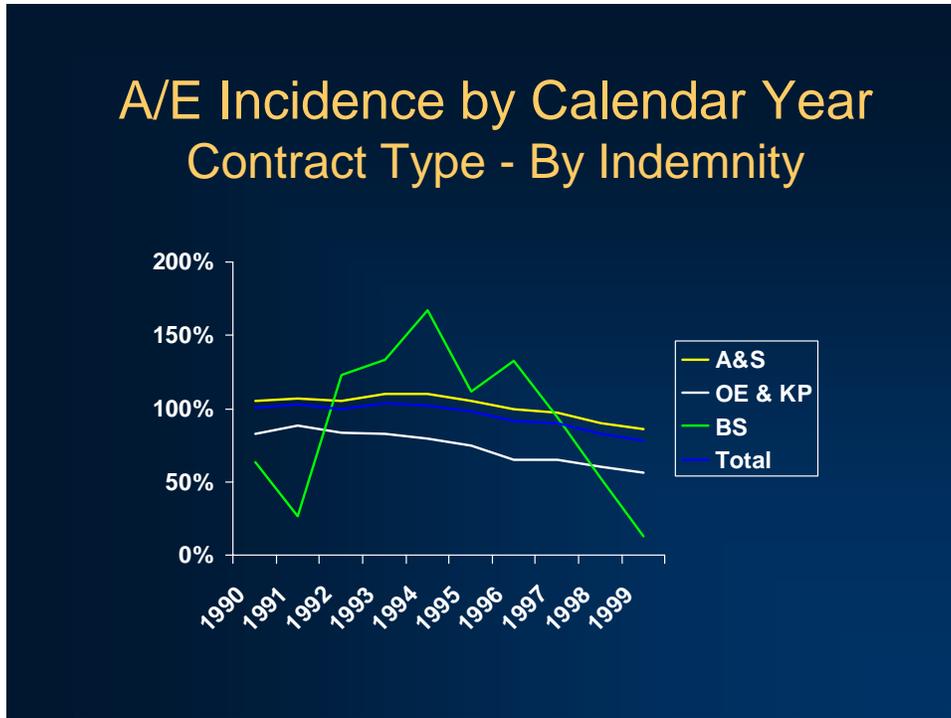
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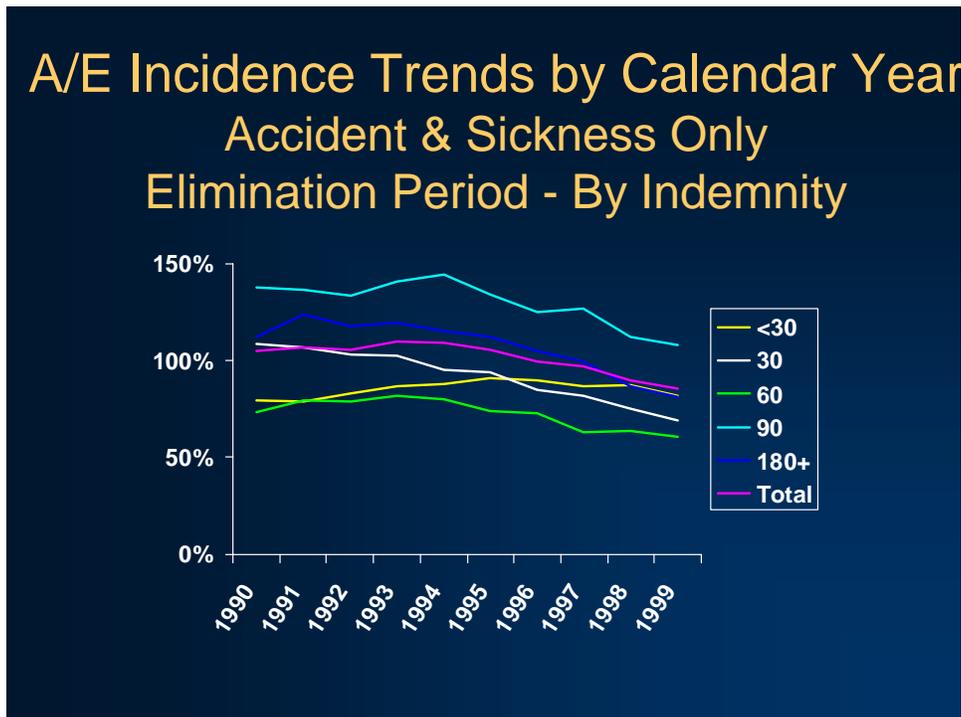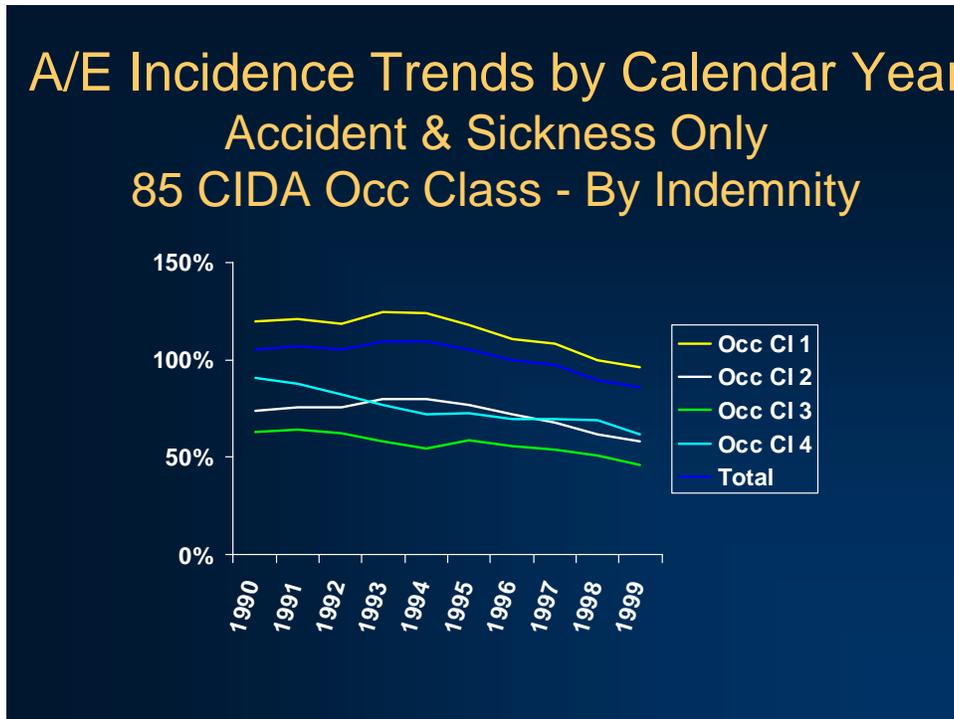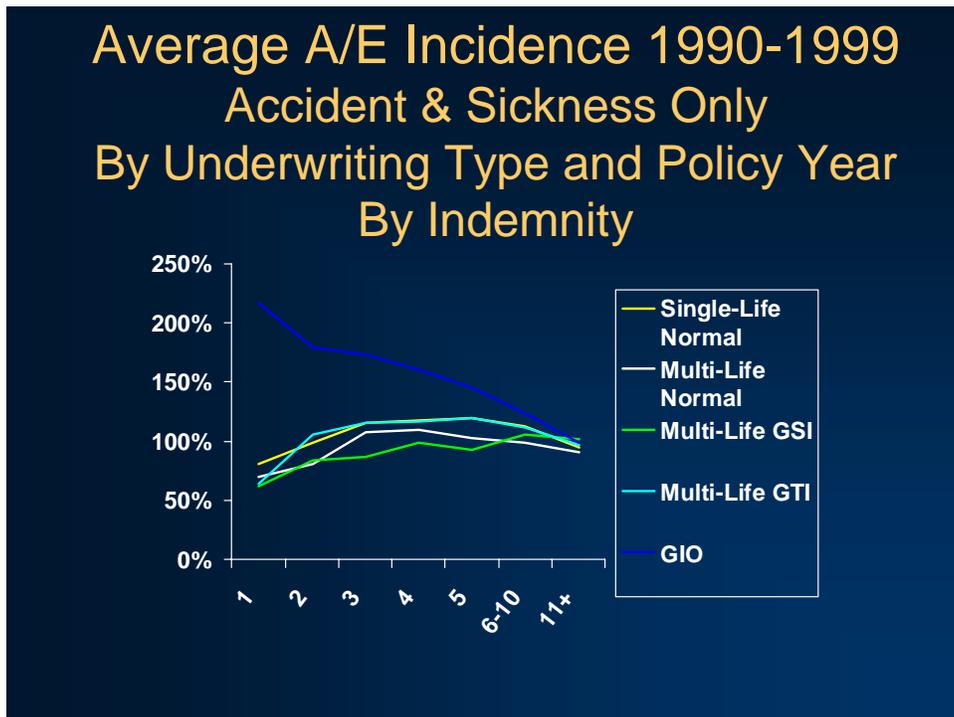
Chart 1

Chart 2

Chart 3

Chart 4

Chart 5