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Short-Term Disability Benefits

Track: Health Disability Income

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Summary: Short-term disability (STD) products have become an area of increasing focus for disability insurers. Attendees gain a fuller understanding of current STD benefits, recent market trends and risk management issues related to STD.

MR. BARRY PETRUZZI: My name is Barry Petruzzi. I head the group life and disability actuarial department at Guardian Life. I'd like to introduce our panel. Rick Leavitt is vice president of actuarial at the Smith Group. He is going to discuss pricing and profitability issues revolving around STD. Next, we have Paul Hitchcox who is senior vice president and chief actuary at Disability Consulting Group. Paul is going to discuss some of the implications surrounding the offering of STD benefits underneath the long-term disability (LTD) plan and I certainly think that it is a topic a lot of people, at this point, have interest in. Finally, I'll briefly discuss some issues regarding the offering of voluntary STD benefits.

MR. RICHARD CARLSON LEAVITT: I'm going to discuss opportunities and challenges for STD. If anyone has a question or would like to start a discussion feel free to jump in. I think it will keep it a bit livelier if you don't let us drone on and on.

Employers are asking, "Why buy STD?" The insurance company's point of view is that it is a good product to sell. I'm going to discuss the growth and profitability, or lack thereof. I'll spend a little bit of time on that and really compare STD to LTD. The main purpose for doing this is that I think most of us that have been working in

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

disability for a while are more familiar with LTD than STD, so it's useful to see their differences and similarities. I will spend the majority of my time discussing the profitably challenges. These issues are the ones that are preventing us from getting our desired profit on this product.

Why buy STD? It's pretty standard in the work place now because there needs to be some sort of salary continuation or payment to your employees if they suffer a short-term illness or disability and most employers have this type of coverage. It ranges anywhere from an informal salary continuation plan, a plan that is run by the employer or a fully insured plan. I want to talk about why employers would want to go with the fully insured plan.

The first point is they can outsource the administration. It's clearly a hassle for them to handle it themselves. The other option they have is to pay a third-party administrator (TPA) to do the administration and self-fund. A lot of employers still do this. Another compelling reason is they can get the disability management expertise of the insurance companies. Presumably, we would know how to manage the fund. This really means that if you hire an insurance company to do your STD you will lower your overall benefit cost, and I think that's the selling point that we make to employers. Our expertise will help them save money.

It's a little bit complicated for the employer to deal with because of the other types of absent-management plans that they have to deal with such as workers compensation, the family medical leave act and LTD. STD has to coordinate with all these plans and it's surely easier for an insurance company to do that because it's what we do.

Finally, we have risk transfer. Usually that's what you think of in insurance—transferring risk from the employer to the insurance company—and I certainly think that is one of the reasons why they buy it, but it's probably not the main reason, which is the administration and the disability management, but there is risk transfer, especially in the small cases. They give us premium, we pay the claims and they're not subject to the volatility of the actual claim experience.. It is a product that employees use and I think that's why it really distinguishes itself from LTD where it's actually fairly rare that you'll file. With STD it's relatively common.

The good and bad sides are shown in Chart 1. The premium growth has been great for this product and really confirms what I was describing before about a product that employers want. It's under penetrated, so there's been really good growth in this product, and if you compare this to LTD growth over the last five years, it looks pretty good. The consistent double-digit growth makes this a great product. The problem with this chart is the profit margin—we're losing money at it. I actually marvel every time I look at this. In an earlier session we saw similar surveys by Disability Reinsurance Management Services (DRMS), which actually showed the profit margin for STD to be even lower than the negative four to five percent for the entire industry. And furthermore, the majority of companies lose money.

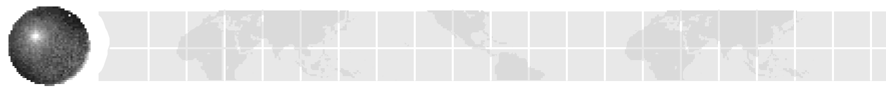
Seventy-five percent of the companies are now losing money in STD. I don't have a great deal of experience with STD, just as I think a great many of us probably don't, and it took me a little while to think about why this might be. It should be a relatively easy product to price and one of the theories I've heard a number of different times is that it's just a lack of focus. We just sell it without spending a lot of time studying it or focusing on the results, and that's really the reason why we're not making money at it. Now, if that's all there were to it, maybe I should just stop my presentation now. I just have to say, "Okay guys, let's focus on it because we're losing money. Let's do it right this time." In fact, I think there are some hurdles in doing this and that's what I want to talk about the interpretation of these hurdles later on in my presentation.

Chart 2 shows what the market looks like now. This is really a comparison between insured STD and an Administrative Services Only (ASO) where you're just doing the administration and funding it yourself. It makes sense because you get the larger employers such as5,000+ lives and it's pretty credible. You should be able to predict pretty accurately what your costs are, so there's not a lot of risk transfer for those employers.

However, the argument that you need to make if you're trying to sell to those employers is that there is some additional expense associated with paying the insurance company's profits. We will help you manage your claims in such a way that you will reduce your overall cost. Now, the fact of the matter is that if we're losing money, it's actually better for them to fully insure just because they're not paying for the insurance company's profits—they're actually getting some benefit from the deal. So we're really helping the employers out by not pricing the product high enough, but I don't think we really want to put that in our marketing materials. I think the other argument is a sound argument, which is that through managing the claims we can lower your overall costs, so I think there's still quite a bit of potential in this market to move this from self-insured to fully insured.

Let's look at STD versus LTD (Table 1).

Table 1



STD vs. LTD

	LTD	STD
Typical Profit Targets	Single to double digit	Mid single digit
RBC Levels (NAIC)	18%-30% of Premium	3%-5% of Premium
Premium / Life	~ $180	~ $150
Incidence	~ 4.5 per 1000	~ 65 per 1000
Partial Credibility	Starts ~ 500 Lives	Starts ~ 100 Lives
Full Credibility	7000 – 10000 Lives	~ 250 Lives

STD vs. LTD (cont'd)

	LTD	STD
Insured Market Size	$6 billion +	$2 billion +
Typical Packaging	STD	LTD, WC, FMLA
Experience Review	3 years typical	2 years typical
Experience Detail	Premium, Claim List, Paid Claims	Premium, Paid Claims
Manual Rate Structure	~20 Factors	~15 - 20 Factors
Common Funding Options	Typically Fully Insured	Both Insured and Self-Insured Common

Profit Targets
The profit targets are somewhat different, as STD has a much finer profit margin than LTD. The LTD is listed as single-to-double digit, which is pretty vague. It is probably about eight to twelve percent and that is pretty standard for LTD. STD is considerably less at four to six percent. Your own target may be a little different from that, but I think it's roughly in that range. If it's not, you can understand why by looking at the second line in the table.

RBC Levels (NAIC)
The NAIC considers STD to be a less risky product because the capital requirements are a lot less. You simply don't have to hold as much capital for STD as you do for LTD, which means to get a similar return on capital you need less profit as a percentage of premium. Maybe the NAIC is underestimating the pricing risk associated with it. If we can't price the product properly, then it may be riskier than what is indicated here, but this is the way it stands now.

Premium/Life
LTD and STD cost about the same. STD is a little cheaper than LTD, but they are in the same ballpark.

Incidence
LTD and STD really differ in terms of incidence rates.. You usually think of LTD as being about 4.5 per thousand, whereas STD is as high as 65 per thousand, so that's 6.5 percent of employees that will file in a given year and that's pretty substantial. That means a lot of employers are making use of the plan.

Partial Credibility
You can get to credible experience a lot more quickly and you can see that in the differences between LTD and STD, where STD starts at 100 lives or less, but this certainly varies from carrier to carrier.

Full Credibility
Full credibility is kind of interesting. It is listed in Table 1 at 7,000 to 10,000 lives and that's usually exposed over three years, so it's something like 20,000 to 30,000 life-years exposed. We count that as 100 percent credible. STD is a lot less, where an average of 250 lives are exposed for two years. I'll give you a little test. At my company we say 20,000 life-years exposed is 100 percent credible, so we'll start with that assumption. Now, what should the number of life-years exposed for STD be that will be 100 percent credible given the relationship of these incidence rates? Think about that and we'll discuss the answer later.

Insured Market Size
Market size is shown at $2 billion and growing. The growth rates for STD have been significantly higher than for LTD, so the gap is closing. It's still not as big of a market as for LTD, but $2 billion is a lot. LTD was probably at $2 billion less than 10 years ago, so STD is a really significant product at this point and there is no

excuse for the lack of focus. There is a lot of money here and a three to five percent loss on $2 billion is a lot of money out the door. It's certainly something that needs to be focused on.

Typical Packaging
"Package" is not the right way to put this, and STD is not usually packaged with workers compensation, but it needs to be coordinated with workers compensation, LTD and Family Medical Leave. . You tend to not worry about LTD, although it certainly coordinates with workers compensation.

Experience Review
For experience review we typically we use three years of experience for LTD, but we would like to use more. We would like to use four or five years if available, but generally three years is what's available. Over the last few years it has evolved that you use two years for STD. I think it varies from company to company so this isn't a hard and fast rule, but it seems to be common in the practice to go with two years. One of the explanations for that is that it is a lot more credible so you don't need as much experience to be fully credible. But in fact, you want to see the experience over time, and as you shorten the period, you really are losing the sense of what the dynamics are at the time. I'm going to discuss that in more detail later on.

Experience Detail
You don't get as much information when you do the experience rating. Because we have to calculate reserves for LTD, we get sufficient information about the claims to be able to calculate those reserves. We don't really need to do that for STD. It completes much more quickly, so you tend to get premium and paid claims. What this means is you've now lost any information about the types of claims,, though in LTD you actually don't get the types of claims all the time, either. But in STD you generally don't get them and you're losing valuable information when you're trying to figure out what the future risk is going to be for a particular case.

Manual Rate Structure
Manual rate structures for LTD and STD are actually very similar. STD is listed here as being slightly fewer in factors, but that's because the product tends to have fewer differences in features than LTD does. Basically, the rating happens in a very similar way and, again, LTD is very rarely self-insured whereas STD is much more commonly self-insured.

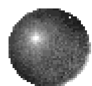
Common Funding Options
As I mentioned, the lack of focus is probably the first thing that comes to mind when thinking about profitability challenges, but there are a number of other issues, which I'm going to run through. One thing I would like to discuss when we're done is what we think any other issues are and what types of things are being done to address those issues. One of the issues, which is really more of a mindset, is that we tend to throw around five percent discounts all the time. What is it worth to

move to a new contract? Five percent. What is it worth to package LTD with STD? Five percent. You get in this type of mindset. Now, for LTD, if you're targeted at 15 percent, a 5 percent discount does reduce your profit from 15 percent to 10 percent, so it takes away a fair amount of your profit, but you're still left with a profitable product. If this is your mindset for STD, where the profit margins are five percent, a five percent discount would be 100 percent of your profit. I think you really have to make sure that we make this clear that it's what you're doing when you do these types of discounts. You tend to be free with them and it doesn't hurt you as bad in LTD as it does in STD.

Another thing is for LTD, and this is true for both products—if you actually look at the experience by case, there tends to be a lot of cases that run pretty well and there tends to be a few cases that run pretty poorly. I think with a higher profit margin it's easier to make up the difference in LTD. When your margin is so fine, you're really only targeting a three to five percent profit. If you've got a couple of very poorly performing cases in there, it's really hard to make that up. I think that is one of the issues with this product. It's easier to go under water because we're starting closer to the surface and that's why a few percentage points in different areas can add up. The small amounts of discounts here and there mean a lot more for STD than they mean for LTD.

Let's talk about credibility a little bit. Table 2 shows credibility formulas that are generally used by most different companies. You can see what I mentioned earlier was about full credibility for 250 lives exposed for two years is 84 to 100 percent and that's pretty credible for 250. How many claims do you expect from 250 life-years? How many claims would we expect for 500 life-years exposed?

Table 2



Profitability Challenges

Experience Rating and Credibility

Illustrative Credibility Factors - 7/7/13 Plan

Case Size (Lives)	Years of Experience 1	2	3
100	20% - 44%	40% - 63%	60% - 75%
150	30% - 44%	60% - 75%	78% - 100%
250	50% - 63%	84% - 100%	95% - 100%
350	70% - 88%	95% - 100%	100%
500	84% - 100%	100%	100%

- Full credibility as low as 250 lives with 2 years experience
- Should more than 2 years be reviewed on a 250 life case?
- Would 2 years fully account for risk?

FROM THE FLOOR: About 30.

MR. LEAVITT: Yes, 30, , 32 or maybe 35. Is that 100 percent credible? What's the answer to the quiz I posed before? If 20,000 lives is 100 percent credible and incidence rate is 4.5 per thousand, how many claims do you expect on 20,000 exposed lives at a rate of 4.5 claims per thousand lives?

FROM THE FLOOR: Ninety.

MR. LEAVITT: Very good. Okay. Now, there's one assumption here about credibility. Remember, what you're trying to do is to find the best choice of rate that's going to be the most likely rate, given the fact that there's a lot of volatility in the experience and that there is also a volatility in the underlying sort of rates for the cases. One case may have conditions that make it a good risk or a bad risk, and that's what you're really trying to capture. Do you think the spread of STD rates and LTD rates is similar, given the number of variables that impact the rate (such as demographics, employer practices, etc.—the "soft stuff")? I think STD and LTD are probably similar., Anyway, what we really want to know is how many life-years exposed would we need to get 90 claims, and if it's 65 per thousand, you need about 1,300 or 1,400 life-years exposed, not 500. For some reason we've assigned credibility at a lot higher levels for STD than we do for LTD. We simply make it more credible than the equivalent comparison for LTD. I don't want to get into what the right answer is, because it's difficult figure out, but there is this discontinuity, so we assign credibility a little more easily for STD than we do for

LTD.

I think a larger issue is the shortened time period. I think we are losing a lot by restricting ourselves to two years because we don't see the play out of the risk dynamics over time.

Chart 3 is an example of how the dynamics of the risk over time can affect things. This chart shows a two-year period for two employers that have very similar demographics. One of the employers experienced layoffs, but there are a lot of events that drive disability experience, so this employer had pretty poor disability experience through a few quarters. That's through the period that's pretty similar. How would you rate these? You'd give Employer B a higher rate, and most underwriters would do that. Now, we can expand. Maybe a layoff has occurred and it's not likely to have another similar layoff. Maybe there's a cycle that goes on and this industry has this boom or bust cycle where it lays off employees every four years, in which case I'd want to take that big increase and spread it out over four years.

If we go back another year, we find that Employer A had a similar experience. If Employer A had experienced layoffs three years ago, we would not have captured that at all in the two-year period. Now, of course, you could easily argue that some have gone back four or five years ago and that we're not capturing that. We're always going to be missing out a little bit, but I don't like the idea of shortening the period like that. I'd really like to see a relatively long period to get as much of the risk dynamic as I can. I think this is one mistake that we're making.

How would you rate that? If you were an underwriter and you were looking at that, how would you use different rates for Employer A versus Employer B? Would you use the same rate? I don't know. It's a judgment call. If I were an underwriter I'd want to know how likely it is that this type of event may occur again and how often it could occur, because it could be a one-out-of-every-ten year event, in which case you're overpricing this by folding in 100 percent of the experience. All I'm really talking about is understanding the risk.

Another issue that goes beyond what I was just describing involves why we might not want to trust the experience rating. We're going to do two different situations—first-time buyers and take-over business. They both have similar types of problems, but it's slightly worse for first-time buyers. The quality of the information you're getting is probably not very good. The employers may not be able to track their disability costs well and, in fact, that's one of the reasons why they want to go fully insured. So it makes sense that this would be the case, but you're just simply not going to be able to believe the information that you have because of data-quality issues. It is that exposure versus an experience question. If you're basing your rate on the experience for this while the data is suspect, you're potentially going to have problems. Furthermore, the cost may be different from the fully insured to self-insured, and I know we've made the argument when trying to sell

that we're going to lower costs, but in general, I think that's probably true. Do you want to build your price based on that? It's a little iffy. There is a possibility that the employer who pays a set premium may not be as concerned with how many employees go out on claim; however, when they are paying the total cost themselves, they may be very concerned. So there are other considerations. It may not be obvious that the costs are necessarily going to go down or that they may shift in an unpredictable way, and those are the things we try to get a handle on. That is why it's important as part of your risk consideration to understand where the employer is coming from.

Now I'll discuss takeover cases. This information comes from another insurance company that has been running the business, so the information is probably going to be better as long as you're able to get it. In our current market, the information does not tend to be very detailed for both STD and LTD. As I mentioned earlier, we're really not getting detailed claim information or a broker may not be willing to provide it. We just have the aggregate-paid claims in premium only and it may not be enough to do good risk evaluation on the experience rating. It just makes the experience rating a little more difficult.

The main point that I want to make is that experience rating is a lot harder than it looks at first glance, and I've looked at enough experience ratings of cases to realize that this is the case. When I originally thought about this question in STD, it seemed very simple. How hard could it be? It's just paid claims, and when you divide that by your loss ratio, you're done. In fact, there are a lot of considerations beyond that. You have to consider a change in risk dynamics over time, whether the information is correct or not and whether or not the costs are going to change when changing from self-insured to fully insured. There are a number of considerations, which isn't to say that we can't figure it out, but it's not so easy. That is one of the reasons why we've had a little bit of difficulty in doing it right.

Table 3

Profitability Challenges

Manual Rates

What we know ...		What we want to know ...
Age		General Health
Gender		Motivation
Industry	➔	Sense of Entitlement
Area		Stress Levels
Occupation		Layoff Risk
Salary		Hazard Exposure
Plan Design		Workplace Culture
etc		etc

I want to talk about manual rates briefly (Table 3). I've spoken about this before in the context of LTD, so I won't spend a lot of time on it, but we really are not getting the information that we want to know. This is true of both LTD and STD. STD has similar problems to LTD in this regard. One of the difficulties is that there has been less time to assess the adequacy of manual rates over time, so it's possible we're not getting it right, but column one of Table 3 indicates what we know. The actuaries have to build rates based on that, whereas what really drives STD experience are the items in column two. This is where the underwriter comes into play and for LTD, many underwriters have a lot of experience doing this kind of risk evaluation and are relatively good at it. We can clearly do a lot better and be more disciplined in it, and our job as actuaries is to help them figure out how to use this information. I get the sense that there's less risk evaluation that's done for STD, and that's absolutely not warranted. If anything, there should be greater risk evaluation because the experience information is a little spotty. It doesn't have to be the case that you don't do this stuff. In workers compensation, there's fairly detailed evaluation of the risk. For any case greater than 500 lives, you may do site visits or evaluate what the workplace is like. They evaluate what the job functions are and they try to get a sense of what the workers compensation hazard is, and we do very little of that in either STD or LTD, but that's really just trying to get a handle on this stuff here.

What happens when you build rates based on information and it doesn't correspond

directly with the risk? You get a spread of results. In Chart 5 we've collected public and STD filings and calculated the rates from all these public filings for a lot of different cases. People don't always file exactly what they charge and, certainly, they may not charge exactly what their manual rates calculate, so it's a little iffy on that, but the spread is still there and this spread is very similar to what you see in LTD. It's not that surprising to me, but it's pretty tough to think that we've got the right price.

Again, what I'm basically saying is that there are all sorts of problems with doing experience rating and now I'm not sure our manual rates are very good either. Who's right? If someone is down here and someone is down there, who's got the right answer? It's hard to say. Depending on the case specifics, the rate may vary. I'm going to briefly go back to the underwriter discretion or underwriter evaluation. That is really how you tell whether or not your manual rates are high or low—by the other considerations that you're not capturing with your manual rates. For example, if employee stress levels are high, then the more expensive rates could be right. If it's a great workplace situation, the lower rates could be right. It really varies from case to case.

I want to advocate underwriter training—working with the underwriters to help figure out how to do the risk evaluation and the necessity to augment your manual rates with the strong risk evaluation are the secrets to selling this product at the right price.

Other profitability challenges include costs rising due to aging employees. If we're adequately capturing that in our manual rates, we'll be okay, unless we're offering two- or three-year rate guarantees or three- or five-year rate guarantees. You do see some of that offered. As employees age, the rates are going to become inadequate, more so than LTD. I think there is a little bit of a commodity perception of it. There's not a lot of differentiating between products, so companies are just going to go with the lowest rate. Again, we have a lot of discounts. We've got to make sure they're justified by cost savings; they can't be casual about it or pretend to be with LTD, because you really will penalize yourself a lot worse because of the same thin profit margins.

In conclusion, STD is definitely a good product and the market needs it and will continue to need it, so I think that we're definitely doing the right thing trying to sell in it, but there are significant challenges that face us to get the right price. I don't think it's just enough to focus on it. We really have to focus our attention on it in an intelligent way. We need to understand the dynamics of this product and how they're different from LTD. I'm an LTD person and here I am talking about STD, and I don't think that's so unusual. I have some experience with STD, but don't I feel like I understand the risk dynamics of STD the way I do LTD, and I think that's probably true with a lot of you that work in it also. We really need to focus our attention on it in order to make money.

MR. PAUL HITCHCOX: I want to discuss packaging and how you put LTD and STD together and come back to a theme where hopefully, at the end of the day, we all remember that there is a policyholder and a claimant out there. That's the important part of this. I'm going to cover topics including profitability, complexity, implications with LTD and how you can take advantage of the situation. At some point, somebody is going to fall out of their chair and say, "We've got enough about the profitability issue!" But I'm going to hit it one more time. I'm going to talk briefly about the complexity and where the STD product has been going, and then get into the issue about the implications with LTD. Finally, to try to end on a silent note, there are ways to take advantage of what happens when you put STD and LTD together.

What I want to discuss was actually brought up at the SOA Dallas Meeting. There was a presentation given about what causes lower profitability when you combine LTD with STD. Although it's there and I've seen it and have been part of some of the studies, I really wanted to come back and open that discussion up and really revisit the issue of what the real drivers are, be it STD by itself or STD when it's sold in combination with LTD. In other words, all of that lower profitability.

One of the questions comes from the lower profitability coming from the increase in sales. In other words, we're all going after the same piece of the pie and no matter how you slice it, there are always 100 pennies in one dollar. Is that really what's driving it? We all have to suspect that sheer competitiveness is adding to the decline in the profitability. A good question that will come up is, when you go through the companies and really look at each one and see what they've been charging for premium, is there a correlation? Do you see that companies are charging a lower premium per life, somehow taking on greater sales, so you really could tie those two together? This is an interesting thing to note, and after having gone through a couple of surveys, you really don't see the combination. It does not seem to be driven merely by somebody who is cost cutting or trying to slice the premium just to bring on sales. So there does not seem to be a strong correlation between simply charging less and having lower profits and driving the sales.

Chart 6 speaks to us pretty directly and I'll ask a simple question. How many of us are good at the way we're allocating our expenses to the group lines? A show of hands please. A few people must be. Now, the question is, with all the hands that are up, how many of you think you are doing a pretty good job of allocating your group expenses to the disability lines? A few more hands should go down. The point being that at the end of the day, how well do you think we're doing in allocating our expenses to group STD? There are no hands showing. I'll take that to mean that, at the end of the day, and I have to say this kind of tongue in cheek, where STD profitability really is may be even worse than what we have seen. If we got around to really allocating the transaction costs associated with LTD to the product line, I think we might be a little scared that the profitability of that product is even worse than what we've already seen in the surveys. I've seen some of the survey results, and when expenses come in and you see the exact same expense

as a percentage of premium allocated to LTD as STD, you have a pretty good suspicion that there's something wrong with one of those two numbers. But there's a real troublesome issue out there concerning the transactional nature of STD and I'll discuss that later.

Then there is a question as to the complexity of the product itself, and for lack of a better name, I came up with "Featuritis." We love to coordinate with LTD. Whatever LTD can do, surely STD can do the same thing. So one of the things that comes out of that, and this has just been a frustration as a consultant, is the number of times I have been asked about pricing the residual definition of disability. With LTD you don't have to be totally disabled through the elimination period. You can be partially disabled and in order to make your 90 days through the LTD elimination period, we would begin to pay a partial benefit.

When I get asked these questions about how that would be handled with STD how would you price an STD residual definition of disability, it makes me wonder. For example, Joe was in at work Friday until noon, then he was out for half a day and then he was back in on Monday. He left Tuesday at 10:00 A.M. and was back in on Wednesday but only for two hours. I don't know who has a system that could possibly even handle the calculation of when you're actually through the seven-day elimination period with STD to know whether or not you're residually disabled and to know whether or not you can pay a partial claim. The amazing thing about it is that it probably has far less to do with the claim cost of STD and everything to do with whether or not you can handle the expenses of calculating if you should pay that partial benefit or not. So again, in terms of the "featuritis" associated with STD, we sometimes are bringing this on ourselves, to a certain degree.

It is surprising to the degree to which this is an interesting product into itself. I think it has great merit, but there are some certain risks associated with that and the complexity that really deserves a lot of attention.

There have yet to be any cost-of-living benefits to STD, but you never know. There are some two–year durations out there that are referred to as STD, and I know somebody is going to come up with that and plant a seed for another day. Some day we'll come up with a conversion and handle it with the STD product.

Now I want to discuss the implications with LTD. More than a few studies have shown this reduced profitability, and I don't want to argue against it. I've seen enough to know that it can be out there, but I wanted to come up with at least a few things to think about such as whether or not it really is being driven by simply putting these two things together. The first one that comes to mind is incurred but not reported (IBNR). To a degree, it's astounding in the study or two that I've seen. No adjustment was made to IBNR on the LTD side, and if you think about it, 40 to 60 percent of your claims are reported after the elimination period. That is the standard assumption for IBNR and you are looking at two products combined and hopefully you know about 100 percent of the claims. Yet, no adjustment was

made to the IBNR, so needless to say, the profitability of LTD was lower because you're holding too much IBNR. So one thing to consider would be that the claims really are already reported.

Moving on to credibility and the size of the blocks. One study said the block that had both STD and LTD was one-tenth the size of the STD alone or the LTD alone, and that wasn't taken into account. Not a big deal, but when we're talking about profitability as being a small percentage of premium, credibility is an important consideration.

There is a reason why all of your brokers and sales reps are always asking you for combinations of the 13-week, 90-day plan with the 26- and 180-day plan. They're not just doing it for all the flexibility. I think they're doing it for something a bit more important to the customer.

Finally, if I may, I'll just jump to the answer. You wonder about these bundling discounts. It's just amazing to what degree 20 percent can suddenly be discounted, because you put these two things together, and no matter what you say about early intervention or anything else, there's a certain level of bundling discounts that we've been very generous about. It makes you wonder to what degree that has driven the profitability between the two products.

I want to explain more about arbitrage risk. I would have to say that every one of our rate structures in this entire industry is exposed to arbitrage risk. Generally, STD is not rated with blue-collar loads and LTD is. These products have generally grown up independently, so they really have never been put side-by-side. With the arbitrage risk, you can point to a lot of different things, but the two main culprits are the use of the blue-collar load and the industry load. Let me show you how this works. Take our two cases. In the first case, I just kept things simple. I put down a 13-week and a 26-week plan and gave some basic rates so that when put together, the two cost you one percent of payroll.

It is interesting when you come along to a blue-collar case. If you apply a 55 percent load to the LTD, the LTD costs go up, but the STD tends to stay the same. The combined coverage is now different. The 26-week plan, since you're pushing out when that blue-collar load is applied, suddenly becomes cheaper than the 13-week or 90-day plan. That's $.05 out of a rate of $1, but that's five percent we were talking about before that would literally take away half of your profit margin. You can make up the same scenario around industry factors. It's astounding to what degree the industry factors between STD and LTD are entirely different. It's astounding to what degree this is also a package by a pre-existing claim. So if somebody knows they're going to have a pre-existing back claim, they're much better off going with the 26-week STD plan, at least to maximize what those benefits are. This gets played out a lot, but it's astounding to what degree these two rate structures have been really developed independently. When you just slap them together, you shouldn't be surprised when the broker is asking you for those

different combinations, because that's exactly what they're looking for. They may be just trying to meet the prior plan, but, on the other hand, if they can save $.05, that's $.05 in their pocket.

To try and end on something of a positive note, I want to say there are ways to take advantage of it. Putting STD and LTD together makes a lot of sense. We've noticed the early intervention, but you really do have a chance to triage the STD claims. From 14 days on you've got a pretty good idea whether or not you've got claims on individuals that are capable of potentially getting Social Security, being able to return to work or going through rehabilitation. If you put the two together, you're going to have a pretty good chance of potentially looking through the rate structure and reducing that arbitrage risk. Don't set the rates independently. I've actually seen a structure where you could create mid-term rates so that the STD comes up through 90 days, the LTD takes off at 180, but that 90 to 180-day period could be a melding of these two sets of rates.

You should link up the two systems. It's amazing to what degree you see that LTD renewals take place and then nobody goes to look at what the STD claims are that are actually out there. Again, we have the IBNR issue, but even more importantly, we are just starting to appreciate it. We do our own damage sometimes as actuaries, because what do we do if the claim is in the elimination period? We calculate zero reserves. I might suggest calculating a deferred reserve. You might as well have an idea whether or not that IBNR assumption you are holding for LTD might be reasonable versus the known claims that are showing up on the STD.

This issue is a favorite one for me, because we have so many approaches in business that were created about 40 years ago. When you have an STD claim today, if you want to help them out, do a prefill of the application and keep it separate from the LTD claim, but at the same time, show customer service and acknowledge the fact that you recognize them as an STD claim as they potentially become an LTD claim. At the end of the day, coordinate the sales. It's a tough debate. If you sold STD by itself and all the expenses associated with that sale and then you sold LTD by itself and all the expenses associated with that sale, there's something to be said for putting those two together. When you put aside the transaction cost, there's got to be something said for selling both products at once.

I think there's a lot of merit for putting STD and LTD together. I think the fact that the studies are out there are arguing that there's lower profitability really has to be researched and challenged more. I wanted to make the pitch that at the end of the day, we really have a policyholder and a claimant out there. It's amazing that we created these products between STD, LTD, workers compensation and Social Security, but there's a claimant out there and the fact that LTD supposedly has better experience when there isn't STD is because we're starving out the claimant and that just doesn't seem to hold water. I hate to think that we're in this business to think that we can starve out a claimant and see if we can prevent that person from becoming an LTD just because we don't want to sell STD. Finally, things like

early intervention and claimant systems are available for a reason. They really are available to help benefit the claimant and the policyholder, and in so many ways, they really should also be there to benefit the insurer.

MR. PETRUZZI: You'll be happy to know that I will not be talking about STD profitability, although it does tie into why I want to include this section in this presentation. I think a lot of carriers, both on the individual and group side, are looking to voluntary business to try to expand their market share and do it more profitably than what they're finding in the traditional market.

I want to talk a little bit about voluntary I'm going to go over distribution and enrollment issues, underwriting and benefit design and pricing, primarily from the group side. Not being as experienced in STD, I admittedly haven't seen that much on the individual side; however, I have seen a fair amount on the group STD side. I'm going to approach pricing primarily from a group standpoint and then address a couple of more esoteric and less technical issues surrounding the offering of voluntary STD benefits in some things we're looking at.

First, we'll start with distribution and enrollment. I'm going to discuss the two kinds of models—the individual model and a group model. We're going to start with the individual model. Again, I don't have a lot of experience in this, but I'm going to discuss the main aspects that you would see from the outside. Individual is a one-to-one personalized sale, typically done with a laptop-individualized illustration. Typically, it is like most individual products because it has higher first year commission and lower renewals. Now for higher participation, Mike and I differ on this, and I think this might have to do with the size of the target market in terms of the case size. Guardian focuses more on smaller cases and Mike had mentioned that they might actually get better participation on the smaller cases because of the requirements, whereas we're still finding that our minimums are about the same, regardless of the case size. Our impression is that they may get more people to buy their product because each person gets more individual attention at the time of sale.

It's generally more expensive, and this is for a couple of reasons. One might be the portability. The group products typically aren't portable and, as I was discussing with one of the other folks from Guardian, it was interesting that they also made more money on the individual side and that might have something to do with it as well. The broker is responsible for the meetings typically or the enrollment.

Now, I'll discuss the group model. Group sale is typically done to a large group of employees or several groups of employees and it's not solicited personally or individually with illustrations. It's just done generically. These are the products and these are the rates. We typically found lower participation and one of the things we're trying to figure out at Guardian is what can we do creatively to improve the product or to improve the success of these offerings, particularly with STD. Like most group products, commissions are still level, although they may be higher for

voluntary coverages than they are for the typical non-contributory, particularly if the broker is doing more of the enrollment or the administration. Some would argue whether it's a lower pressure sale or not. Some people might call it a "lower personalized" or "less personalized" sale, and many times the broker is a conduit and the company actually does the enrollment. Guardian itself has about 160 benefit advisors, and one of their main jobs is to actually go in and enroll groups for all of our group benefits, and certainly STD is one of those.

Next, I'll touch a bit on underwriting and benefit design. Again, in the individual models, percent of salary or scheduled (some would say flat benefits), would work. A lot of times it sounds like it could be issue age more so than attained age, but it might be both or either. Generally, there are age band step rates, three age bands, and that will be a little different on the group side. Maybe it expresses premiums instead of rates if they're doing an individualized illustration. Sometimes it might be more understandable to people if they give it as premiums, not as rates. It might be more understandable if you show them what they will pay per week or per month. Then they have benefit limitations such as a pre-X or conditional questions. I'm going to touch on the conditional questions a little bit later. I think that's an interesting concept for the group side.

Next, we have the group model. We have both composite or age-banded rates. We get requests for both age-banded rates and, at times, for composites and that always can be an issue. Typically, if it's age-banded, they are attained-age rates. The plans, at least from my experience, are generally similar to your employer-paid, non-contributory plans. As mentioned, there might be less flexibility, which I think is the case for the group side. You have a non-contributory type design and it's the same thing on the voluntary side, and even on the group side, though you may also have some additional limitations, such as pre-X or GI limits. In STD that's not much of a factor, but in other coverages it may be.

I'm now going to talk about pricing from the group side. My experience on the group model is that it's usually built from your non-contribution platform. You start with your non-contributory rates. You calculate your basic rates and then you adjust them for some of the different considerations that you've got in offering voluntary benefits. So in terms of looking at some of those pricing adjustments, obviously the first thing is your participation load. I want to discuss some of the different participation loads. Obviously, you vary it based on your participation percent, that's pretty clear. Depending on your male/female content, you may have different loads that build up into it depending on the split. We've seen that some companies will do it depending on whether or not they're a composite rating or step rating. Their voluntary load may be as much as 10 to 15 percent higher if they're doing composite rating versus step rating.

You want to account for your expense differences. Commissions, as I mentioned earlier, may be higher and you may have to build additional enrollment or administrative expenses into your pricing model, as well as the benefit limitations,

pre-X or anything you did to try to mitigate your claim experience or mitigate the risks that you might try to take credit for. Anything that might be one of those five percent things that Rick talked about.

Let's move on to some of the additional issues. I'm interested in getting people's feedback. One of the things I've been questioning at our company as we have made more of a push into the voluntary arena, is how well we underwrite the actual process of both the commitment on the broker's part and the commitment on the employer's part to try to make a successful program. One of the things we've developed is a program where, if the employer signs a commitment to holding mandatory meetings on company time and demonstrates a commitment to the process, we would make certain concessions, potentially waiving the participation requirements and also giving rate guarantees for some of the other non-STD coverages. For example, for life we might actually change the GI level depending on what the employer is willing to commit to.

The next thing, which Mike mentioned briefly on the individual side and is also a very interesting concept, is exploring ways to conditionally underwrite the disability product. Do you offer a certain level of benefit if they answer a question a certain way, but offer more if they offer it another way? Is this another way to get at some risk mitigation? Initial benefit limitations are also interesting. One of the things we discussed with regard to offering voluntary short-term coverage is that your pre–X, because of the nature of short-term coverage, might not catch a lot of things because you can have pregnancies or other voluntary or elective surgeries—things that if someone decides to do after the effective date, your pre-X isn't going to catch anyway. So the question is, "Are there some limitations or plan design functions or features you could put into your plan and mitigate that and obviously with a rate impact such as longer earned premiums (EPs) during the first year? So far, our market research, at least from our sales force, obviously hasn't been that positive, but that's one of the things we're trying to kick around to see if that might be useful.

If you're offering other products, "mind share" is an interesting point that I think most companies have dealt with. Some people would call it "wallet share," whereby if you're offering voluntary life, voluntary LTD and voluntary STD, and you're offering it all at once in a group setting, that person working at the factory is thinking, "I only have $10 a week to spend on this stuff, I can't buy all three of these things." If you try to offer all of them, one or more of your product is going to suffer. So one of the things we've looked at is what is the right combination or the right number of products that you would offer at a given time in an enrollment meeting to a group? If that's successful, do you go back and try to work with the broker and go back later and enroll something else?

MR. MICHAEL FISH: I have a question on the overall profitability issue of STD. How much do you feel could be related to the fact that it is such a known entity on what the claim cost is when you get into the large case side? Do you feel that

perhaps you have to give away some of the premium to actually get the sale for the employer? In other words, the employer has an idea of what that cost to him or her is per year. Do you feel that maybe the reason why we got low profitability is because we have to have a lower cost to actually sell the case?

MR.LEAVITT: Yes. I think there's something to be said for that and that's the claim you're selling to the employer. You sign up with us, we're going to lower your disability costs, which have been X dollars for the last four years. You've got to give them something less.

MR. FISH: I think the follow up is from an STD perspective. How much value we add in the claims process? I think there's a lot that can be done on the LTD side, but on the STD side, when some of these claims are short durations, such as two- or three-week claims, do you have time to add value? Are there too many promises being made up front?

MR. LEAVITT: Yes, especially when you talk about the issue of tracking your expenses reliably. You may be able to reduce the claim durations, but you may cost more than it's worth and you may not even know that, so it may be even worse. If that's really the case, then we probably shouldn't be selling STD to really large employers and we should be focused on the smaller employers. The issue of whether the claim costs are predictable is part of that and I'm curious about this. I haven't looked at enough large case experience. Have people looked at enough large case experience to have a sense about it? Is it really as predictable as our assumption is? Are there risk dynamics that go up and down that make the claim costs not as predictable as you might think?

MR. PAUL HANSEN: I have worked with a self-funded case for over 10 years now. It has 6,000 lives and we do both the LTD and the STD. It's a specific and very unique industry and those dips and valleys apply. We have found that you can anticipate some of those things and we actually had to modify the STD benefit in the middle about five years ago and it's very predictable. You're going to get your fluctuations, but it's pretty flat. Reserves are a piece of cake. They go up and down with the economy and the layoffs, or the anticipated layoffs are more of a mindset than the actuality. If they think something is going to happen, you see it. So as opposed to the LTD with 6,000 lives, you're talking about the 20,000 life, what's credible. I would say that once every four years I get a 300 percent spike in the rate.

MR. PETRUZZI: I think you bring up a good point. It also ties into something Rick was saying about how comfortable we are with our manual rates. I think a lot of times on some of the larger cases, particularly if they were self-funded and then they're going to fully-insured, it first of all, makes you wonder why and then, second of all, makes you wonder if you can really peg that with your manual rates. A lot of times we find out that we can. I definitely think that has an impact.

MR. DANIEL SKWIRE: One of the challenges in voluntary STD seems to be coordinating the benefits with all the other sources of disability income that are available in those very early durations of disability. Sometimes it's even earned income, but there's also sick pay, state programs and all these other kinds of things. It's especially hard on voluntary, because folks are paying their own money and don't like to see their benefit reduced. In your experience, how feasible is it to get coordination with other benefits right from day one on voluntary STD (VSTD) plans?

MR. PETRUZZI: That's a great question. I certainly think it's difficult and I think one of the ways that carriers, and one of the ways we have actually tried to get around it, is actually offering a non-integrated voluntary plan where obviously, you have to rate for it and your benefits won't be at the same level. That's one way to get at it, because I agree with you, I think it's very difficult, particularly with making some of the state disability plans consistent. We write a non-integrated plan and the first thing our California guys say is, "Hey, this is great because it doesn't integrate." They had to explain how the benefits work versus the regular one. I'm not sure there is a great way to really coordinate. I agree with you— starting day one there are many different sources and one of the ways we handle it is actually doing a non-integrated plan.

MR. HITCHCOX: Or conversely, making the STD plan a non-opt plan by definition and letting the workers compensation cover occupational. It's a little tough. We're recreating the same problem having these separate products, but it's really the only way I can see where you can easily sell a product and convince somebody that the workers compensation is covering part of the risk and we're trying to fill in the rest of it.

MS. STACEY VARNEY:I was very interested in your comments about underwriting the culture of an environment and your discussion about the workers compensation approach. From the absence-management research work we've done as well as work on other companies, I think it's pretty clear that there are a fair number of employees who are out of work for reasons other than real injury and illness. I'd be interested in some discussion around that topic and whether or not we, as an industry, really think we could move into an environment where we're underwriting more of the culture of a company.

MR. LEAVITT: I think that's an excellent point and I think we absolutely need to be able to do that more. It may not go so far as to do the site visits that we do with workers compensation, though. I think the premium levels are a little different, so it might not be worth it for the same size case, but we as actuaries have to help the underwriters figure out how to do that. They're on their own at a lot of companies. They're trying to make judgments. Is it worth five percent? Is it worth 10 percent?. They really don't know. We need to set up mechanisms to track the softer-type variables. We need to track the decisions that are made so we can go back two or three years from now , evaluate it and decide what it's

worth. How much is the corporate culture worth? We don't know and that's our failing, so I would encourage you as actuaries to go back and talk to your underwriters.

MR. HITCHCOX: For what it's worth, I would make a pitch. Trying to get to the culture, that is the $64,000 question, but it's astounding to what degree every little hometown paper is probably accessible through the Internet. When you're underwriting a case, there's really no excuse not to at least check to see if that employer has been in the news. We're looking for layoffs and that type of thing, and it's not tough to do a quick search in order to see if that employer is showing up. It's the 21st century coming to us. A 20-second search on a search engine might be able to help you find a few things—not necessarily the culture or whether or not the CEO is a crook, but we should at least have an idea of what's going on with the business. I don't know about you, but it would be tough to find out the next day that the business was in the news and you just didn't bother looking it up.

MR. PETRUZZI: I have a final thought on that. I think it's a very interesting point and one of the things that probably will be a challenge for us is to balance getting the kind of information we think we need that will be predictive enough to be useful and, at the same time, make it easy enough to be able to do. We looked into this a year or two ago for LTD as well, and the two issues that we found were: (1) What questions do we come up with that we think will be predictive? and (2) we had gotten some push back, obviously from our field force, about another hurdle they have to go over to write a case, so how do we make that easy for them? Even if we find the right questions, I think that's another thing we'll have to look at.

MR. JOHN D. LADLEY: To get at the culture issue at least for small to medium size cases as well as other issues, I found extremely high value in selecting and keeping track of the producers that you're doing business with. Do any of you have any comments on the importance of underwriting the production side as well?

MR. LEAVITT: I agree that it's important to do. I don't have a lot of experience with companies doing a whole lot of it, but I think tracking results by producer is an important thing to do too.

MR. PETRUZZI: Yes. I definitely agree. That's something that we're actually starting to look at now. We feel we have enough data to be able to compile and look at experience by producer for a number of different things and then obviously, the big question becomes what exactly do we do with it and how do we use it. I definitely agree that's something that we're looking at.

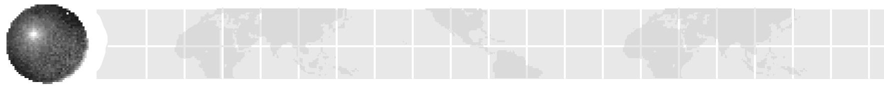
MR. HITCHCOX: Just to go way out on a limb, it's amazing if you do it by the producer. If you can do it by the sales rep and if you can do it by the underwriter, you would be surprised at the answer. It's amazing that there's a reason you have a top quartile of your best sales reps. They're good sales reps and there's another reason. Between the producer, the rep and the underwriter, it's not a bad way to

track. I understand cases change and that the rep who sold it is not the rep who renews it, and the same thing with the underwriter, but for the sake of trying to get insight into the profitability, it's well worth it to try to track that type of information.

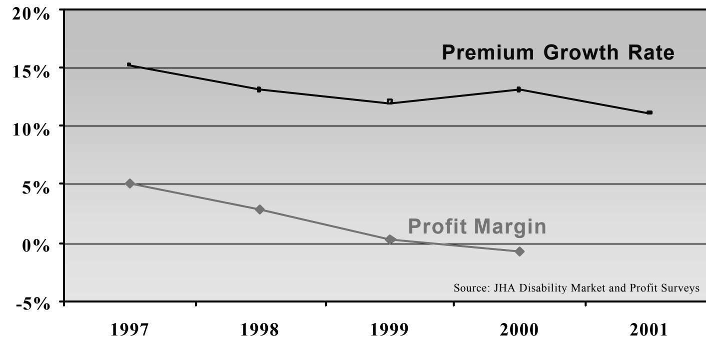
MS. DEBRA LIEBESKIND: When I was doing underwriting and earnings analysis of this stuff, I created a mechanism to track earnings by sales person and producer. Be really careful what you do with the results. I almost got fired for it. It was incredibly telling and it was very helpful from an underwriting prospective, but it's very politically charged, so be careful.

MR. PETRUZZI: I definitely agree. That's a good point. That's why I said we have to figure out what are we going to do with it, because I definitely think that's an issue.

Chart 1

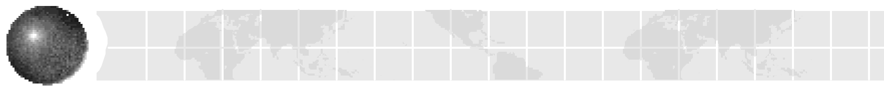


Growth and Profitability

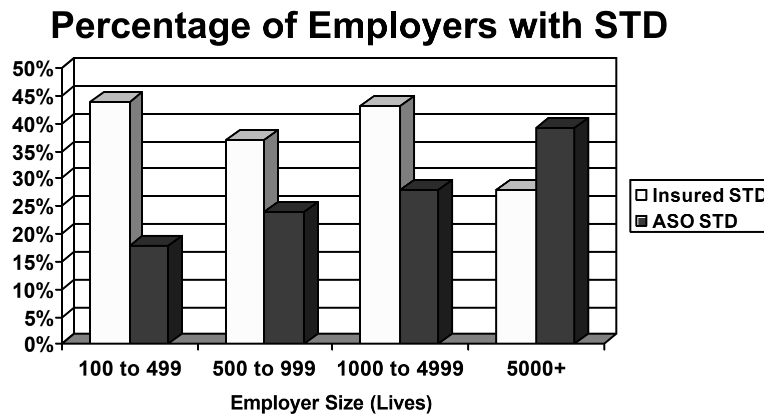


- Consistent double digit premium growth
- Steady decline in profits

Chart 2

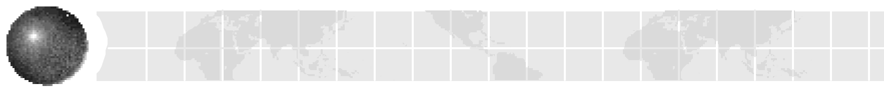


Market Snapshot



Source: Limra , "Marketing Group Health Insurance and Health Care Benefits, Trends, Insights Phase II, 2001"

Chart 3



Profitability Challenges

Experience Rating and Credibility

- Assuming similar demographics, how should these two 100% credible cases be treated?

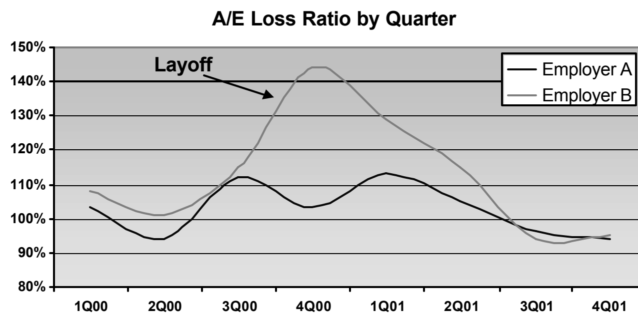
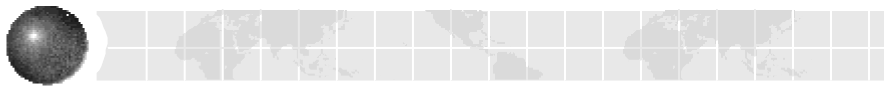


Chart 4



Profitability Challenges

Experience Rating and Credibility

- Now, how should these two cases be treated?
- Would we review the third year?

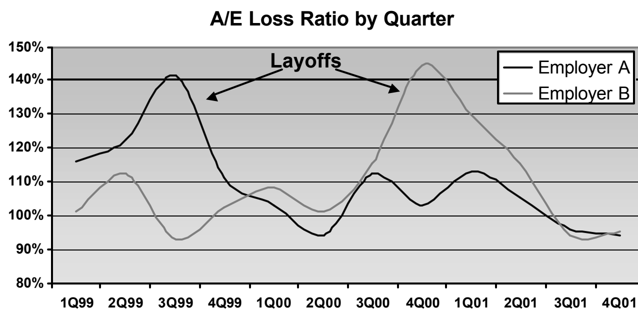
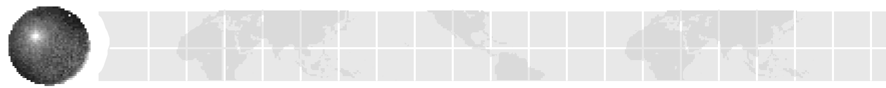
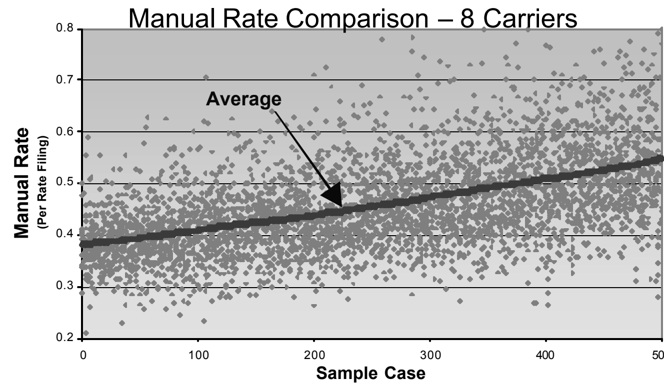


Chart 5



Profitability Challenges

Manual Rates



•Rate structures and factors vary significantly !
•Who's "right" ? Is anyone "right" ?

Chart 6

STD Profitability

- STD profitability steadily declining
  - Sales increasing?
  - Correlation with lower premium per life?
  - Are expenses set appropriately?
  - Profits even worse considering transactional nature