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Keys to Successful Financial Management of Disability Products

Track: Health Disability Income

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Summary: Panelists discuss financial metrics and processes used to successfully manage group and individual disability products. Discussion topics include analysis of actual-to-expected loss experience, tracking of pricing adequacy and competitiveness, leading indicators of financial results, profitability measurement and source of earnings analysis and similarities/differences in individual and group financial management.

MR. STEVE SCHOONVELD: A couple months ago, Ben Yahr shared with me the title of this presentation, and my eyes were drawn to the words successful financial management. What does this mean? What is the meaning of success in this situation? Having spent a few years in financial reporting and forecasting, I assume it means to have no surprises. Of course, the implication of a no-surprise approach differs by product. It may be very different for annuities than for life products, or in this case, disability products, but certain methods and certain analytics will help us prevent these surprises.

We have three experts with us who will help us understand what it takes to manage a disability line and to minimize those surprises. First, Steve Mitchell will speak about the metrics and measurements of key drivers of disability plan financials.

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†Mr. James P. DePre, not a member of the sponsoring organizations, is vice president of accident and health at Towers Perrin Reinsurance in Philadelphia.

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Steve is vice president of group product pricing and analysis at UnumProvident. He has responsibilities for the rating and analysis of experience on the company's group lines of long-term disability, short-term disability and group life insurance. He has worked with UnumProvident and its predecessor companies for 18 years and has experience with multiple group products, including pensions, medical and long-term care. Steve's primary focus for the last 13 years has been in disability, with roles over time in financial reporting, financial and business planning, valuation, underwriting and pricing.

Jim DePre will address the management approaches from an underwriting and sales perspective. Jim is a principal and vice president of operations in the life and health division of Towers Perrin Reinsurance in Philadelphia. In addition to the day-to-day operations of the life and health division, Jim works for life and health insurance companies in evaluating product designs, underwriting, market strategy and reinsurance opportunities for their product portfolio. Prior to joining Towers Perrin in 1999, Jim held senior leadership positions in group underwriting in several life and health insurers for more than 20 years. He has also held underwriting positions with CNA Insurance and AIG. Throughout his career, Jim has focused on the group life, disability, dental, personal accident, long-term care and stop-loss medical products offered through the employee benefits channel. He is also the chairman and founding member of the disability committee of the Group Underwriters Association of America.

Steve Tenaglio will be performing magic up here, which is appropriate for our location. He is going to help you make your CFO happy, if that's possible. Steve has been an actuary with CIGNA Group Insurance for the last 15 years, the last four of which have been spent running the reserving unit. Prior to reserving, Steve was responsible for creating operational capacity models and divisional financial projections.

I would like to take a few minutes to summarize an example of an important tool for managing these products. A source of earnings analysis is frequently used by other product lines to provide information on net income on a quarter-by-quarter basis. Let's begin with a typical income statement

Premium	1,000
Investment Income	300
Revenue	1,300
Benefits	800
Comm. & Exp.	400
Expenses	1,200
EBIT	100
Taxes	35
Net Income	65

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This is a basic presentation that does not really provide strong explanatory powers to assist in understanding what's driving income. It is designed for reporting income and can provide a simple method for comparing actuals to what is in a plan. Therefore, this is not a tool with sufficient explanatory power that will help you.

We now take this and turn it into what we will call a source of earnings analysis.

Issue (Sales & Renewal)	50
Claims	75
Investment Income	(15)
Management	(10)
EBIT	100
Taxes	<u>35</u>
Net Income	<u>65</u>

We have the same level of income: \$100 before taxes. We have defined four areas of interest to track. They are issue, claims management, investment income and a general management category. These are just for this particular example that we've selected.

This is presented to help management focus on the drivers of net income and will allow us to compare actual results with the expected within pricing and planning and will assist in setting these assumptions. Of course, if you have your actuals expressed in this manner, you should also have your projections, your plans and your forecasts expressed in this manner. You may need to enhance your projection capabilities to do so, and the categories you may select will differ. If you're looking at an Individual Disability Income line, you might want to submit information on DAC amortization or DAC deferrals. If you're looking at an annuity line, you might want to include the true-up component of your DAC. While we review these four items quickly, you might want to think about what types of metrics and what types of tools you may also need to explain the variances you observe to what was expected.

First we have issue. We are just looking directly at the top margin within pricing. A representative formula for this purpose, and these don't have to be in stone although you do want to be consistent, is premium less claims, less expenses. Here, our representation of expected claims is based on some anticipation of the profitability of the business, so your incidence, your termination and your offset assumptions should be based on your best estimate. You could also use an expected incurred loss ratio approach as well. Expenses should not include overhead expenses, but only sales, underwriting, DAC and commissions.

In our third category, we can capture the impact on net income of claims experience as compared to assumptions. The calculation given here should be the comparison of actual to reserve assumptions. To assess a true effectiveness of claims management, we might want to incorporate or understand the conservatism

that is implied in those assumptions. The benefit payments plus the claim reserves, plus the change in benefit and expense reserves is a formula and you may need to use some simplifying assumptions to get at some of these pieces. It might not be a straightforward calculation of determining the change in benefits that's not associated to interest.

On the investment income side, we're looking at the spread between portfolio yield rates and a reserve discount rate. We are not looking at the margin within the investment rates that you assume in your pricing. The supporting metrics to be used in this could be simply just the actual portfolio rates, your expected portfolio rates and the actual discount rates and what your expected discount rates would be going forward. In this way, you would be able to compare that to pricing, as well as to plans. Just as in the previous category, an approximation method might be needed to determine the credit interest and the change in reserve amounts.

Finally, as with similar income bucketing mechanisms, there has to be an "other" category. This one we have named management, and it is for overhead expenses and any other one-time items. However, if you just include this as an "other" category and simply calculate this as a plug, you should make certain you have some way to verify that amount.

Now, keep in mind this metric and the explanatory that you were thinking of as we were going through these four items. We will review them toward the end of our presentation, and we will get a chance to discuss our related experiences.

MR. STEPHEN J. MITCHELL: As Steve mentioned, I'm going to discuss some of the ways that we establish metrics around the disability business, and try to seed your thinking about some of the things that you might want to look at. A lot of my background is in pricing, so my presentation will have a pricing bias, but it's critical that you line up pricing metrics with all the other metrics that flow through the whole loop of operations and financial analysis. That being said, I would ask you as I go through to keep three themes in mind. One is that although we may be addressing different subtopics in these metrics, I'll have a pricing bias. The other Steve will have a financial statement bias and Mr. DePre will have an underwriting bias. They're all part of something that's going to establish a feedback loop to be able to set some expectations for your business, watch how the operational outcomes come out and then make that feedback loop to make changes. So they're all part of one circle. The second thing I'd ask you as we go through this, you'll see there are multiple metrics and I think that's appropriate for a couple reasons that we'll talk about. You can get over metric-ed but you also want enough to be sure you understand at a fairly granular level what's really impacting your business. I was thinking as Dr. J. Craig Venter was speaking, a lot of folks sometimes look at businesses and they have a one-metric view, like a loss ratio, and when it's north or south of where they like it. It's very difficult to make decisions on what's going on with the business or what's the diagnosis. I'd liken it to if a physician only had your temperature as the only test they could take and was going to diagnose the

cause and the cure from just your temperature. That would be probably a bad thing. You need more than one test for a physical diagnosis, and you need more than one metric for a financial diagnosis around your business. I think it's important to differentiate as we go through these metrics, to think that you might be using the same metrics for different purposes and specifically think about whether you're using them retrospectively or prospectively. Retrospectively, if you're looking at metrics to try to understand the past performance of your business or what happened in a particular time period, it is clearly an important question in light of evaluating financial performance. The other reason you're looking for them, again, in context with that feedback loop, is to try to use the path as one guide point in prediction of where you think the future is going. If you're going to reset the dials for your expectations and your pricing, you're really concerned with what's going to happen in the time frame you're going to price for, which I call the rating horizon.

One thing to keep in mind as we look at disability is that globally, disability creates a lot of challenges for measurement, and there are a few reasons for that. One is it's a business with multiple drivers of cost. You have incidence, recovery patterns and termination patterns that are comprised of folks returning to work and mortality. You have interest, the rate of interest with a discount rate, offsets salary impacts and plan design impacts. You have multiple factors. You also have a product with a long tail that can exist. You have a product where relatively moderate shifts in the assumptions around what's going to happen in that tail can markedly change your view of what the current or future costs might be. Clearly you have, and particularly if you're looking at segment levels as you are often in pricing in trying to set rates for particular segments, you may get some challenges in finding credibility and critical mass to really reach informed decisions. I want to note that it's a product that has some sensitivity to the environment within which it operates externally. We talked about interest rates, the economic environment, there are impacts from public policy around offset behavior, taxation that governs or impacts replacement rates, so it has a lot of sensitivities in that way. I'd note that the cycle times for the product are changing, in terms of the speed in which we see people entering and exit the market and the speed with which social change is occurring. It is all accelerating, which makes it more important to have metrics and harder to get a good read on what's going on.

Before we talk about specific metrics and measurements that you might want to look at, I have a couple comments on how to think about which metrics you might need or how to set up different expectations. Ask some questions. Do you need a separate expectation? Do you need a separate expected basis or expected metrics for a particular incidence rate for a product or incidence rate for a segment? Do you think you'd want to understand the performance on that segment? Often when you have new products, even if they're particularly small, the temptation is not to have a separate expectation, but to have a blended expectation or something that's very loose. That can create issues down the road as the product grows or its management starts to ask questions, as they're apt to do. They may ask, "How's the new product performance going?" You want to be able to answer those product

questions. You want maybe a different expectation of incidence or offset determinations depending on segments you rate differently on in particular, if you rate material differently, such as industry. These are just examples. There will be other important things to think about. You might want different expectations for each segment that has parameters that could create differences. It might be a very similar product, but you might have more than one distribution channel for the product that over time can create differences in the experience you see. So you may feel that you need to create different expected benchmarks.

Importantly, you need expectations that get down to an operational level. It's easiest to think about expenses. The level of expense setting expected for your products. The further down you can get the expected level linked with the operational folks who are aligned for that outcome, the easier it's going to be to diagnose where you think the product performance has come from. And what needs to happen to get it back on track should it stray.

My last two comments are on tracking. After you set up your expected, be sure that when you go to measure your metrics, if you're measuring them as actuals to expected, that you keep similar definitions and exposures to how you developed the expected. You can't define industry classifications one way when you establish the expected and measure actuals another way. That can often happen when two groups work on the pieces. You want to be sure you link the pricing to the operational components up front. Again, think in terms of that loop and keeping a clear line of sight as you go through operations to get feedback.

One of the key drivers of the performance is going to be incidence, and there are several different ways to look at it. I'll just list them to kind of get you thinking. Some folks like to measure submitted incidence, just mail that comes in the door. Some folks like to measure incidence as paid, those folks that receive a payment, or you may want to look at both. They serve various purposes. One of the ways you might want to cut it would be by age, and I think age is going to be increasingly important. I think there's been some discussion about that here at the meeting and there might even be some other sessions going on at this conference talking about the aging trends and how they'll be impacting incidence. It makes it important to think about how you're measuring that and if you're reflecting that in your pricing and your operations and back through your processes. Clearly measuring incidence relative to your pricing factors, how you're performing on incidence relative to expected by industries and geographic areas and even taxability, whether the benefits are taxable or non-taxable. You should think seriously about having different expectations around those so you can understand the impacts that arise.

Say you set up a system where you establish expected and you measure your actuals to the expected, you'll want to look at the trends during the period and, again, think of it from two standpoints. You're going to need to explain past history, or take a retrospective view, and be thinking about what you expect the future to be like, that kind of prospective view of where you think experience will be for the

next generation of business that you take on.

Resolution rates are another important component of product performance, and there are several areas here that are important to understand as you're trying to understand your product performance and measure where you think the business is headed. You want to measure your actual-to-expected resolutions. I'd recommend that possibly you try to look at those in different buckets, people who return to work separately from mortality and separately from internal benefit limits in the contracts. Because, as you see changes in actual to expected rates, it's going to be important to understand what's driving that and whether it's an operational process. Or changes that are taking place in your own organization, or its external factors, such as mortality, that you may not be able to impact. Or it's simply a function of the mix of business and the benefit limits that might be inherent in your contract. The other thing I'd say is when you look at actual-to-expected resolutions, it's good to take a couple of views by duration. If you do the math around the present values, each value is not created equal depending on where it occurs, or where the deficit or overage occurs along the curve. You'll want to be careful to understand the financial change. In line with that, looking at both count and dollar basis can be helpful to understand whether you're getting what you expect out of the product performance. A couple of other points might be useful if you're looking at impacts by different causes of disability. They clearly have different patterns around diagnosis, and to an extent that you have a block that supports that or that kind of analysis, it will be useful. Also, for different definitions and disabilities, different contract parameters, they should have different expectations of what will occur for resolutions. You'll see different experience as well. You should be thinking, when you look at this, about what's happened in the past and what you think is going to happen in the future. If you had events in the past, whether operationally, economically or externally, which have affected the level that you have seen, are those continuing or not into the future, and what would you expect?

There are offsets on the group side of disability. Offsets that come from Social Security, workers' compensation, public and state programs are an important component of the cost. It can offset a third of the dollars to be paid. It's a wide variation, but this is an area where, again, the more you understand about what happens here, it's going to allow you to diagnose what's going on with this part of your business. Things to consider when you're setting up your expectations are both what you expect about the amount of the award that each of the people would be getting, whether you relate that to salary, age or whatever. What would your expectations be about the timing of receipt? Most people will receive it along a continuum of where they are in their disability, and also the expected duration of the award. Workers' compensation has both permanent and non-permanent awards. Social Security awards can erode or disappear at different points over time, so you want to be sensitive to those factors as well.

Interest rates are clearly an important area. They have a heavy impact on the cost, since we're dealing with a product that has long tails. You'll want to look particularly

at the new money rates that you think as you're putting generations of business on the books and working through each year. You can look at your portfolio rates as well. Two notes about interest rates. One good way to get a good education and look at and leverage somebody else's work is to work with the valuation actuary as they go through cash flow testing. They typically have a lot of good information about the make-up of the investment portfolio, and have good ways to understand the sensitivities that may be there. That should allow you to get a better understanding for both pricing purposes and other purposes of what's going on with that realm.

Another important thing to note is a lot of the cost categories we talked about may or may not be highly segmented in terms of where they occur. Incidence changes can take place within industries or globally. Resolution experience can improve or deteriorate globally, or within causes, or be impacted by new causes or emerging disabilities. Interest is typically one that's fairly global. Usually the interest rate you're investing at isn't going to differ by whether you're writing a manufacturing case, a hospital group or white collar or blue collar. There's one market and typically one strategy that companies pursue, and so the impacts are usually pretty global. They are not segment-specific, which again has implications for how you think about the rating. This is another area where it's important to be aware of history, but also be well in touch with your company investment department about what the expectation is for the prospective view as you're looking at the new generation of business coming on.

I have two important points for expenses. One is some expense categories are hard to miss. Some are pretty easy if you look at base commissions or you're looking at your internal underwriting organizations. Those you can usually get. Be sure that you don't miss things that are sometimes harder, or live on the fringes, such as bonus programs that may overlay the basic commission structure. They are often a non-trivial component of complete compensation. As well as if you contract out expense work or consulting, be sure you pull that into the cost mix, particularly if it's an ongoing commitment that's within your organization. The other point I'd make, and this gets into tying to the operations, is to be sure that you measure operating expenses at the lowest level possible, at least at a level that's consistent with how you operationally manage the business. I'm sure everybody has probably had the experience where you make a global expense assumption and if you go back two years later, everybody agrees that the expenses for the product are too high, but everybody thinks it's the other guy who's overspent their budget on the product. It's the other function rather than their own function. So you have to get it down to a level where each of the functions is fairly committed to what they intend to support for the product if you're going to make it actionable from an operational perspective.

There are some things that don't really exist in the group world and need to be additional considerations as you think about individual disability; things like the active life reserve. As you're setting expecteds, the underwriting impact is a select

and ultimate view. Depending on the level of underwriting you're doing in the individual process, that should impact what you set for expecteds as you look for that incidence and resolution experience. Application resolution rates are more of a process, which includes the number of applications you process and how long it takes you to do so. The classifications that you need to consider with IDI are somewhat different than with group to align operationally with the pricing and the execution on the product.

Areas that we talked about that might need additional emphasis, if you're talking about in an IDI environment, would be things like acquisition expenses. This tends to be higher for policy dollar on the IDI side; compensation, which tends to have a much different schedule; and, again, the same concept as we talked about with the group, but a different level. Persistency is another one that given the permanent nature is an important element of the contract. The investment rate on any active life reserves is important when talking about new money risks that would impact the disabled life reserves. Here you've got another kind of element of investment performance that will be very important to the product over the long haul.

MR. JAMES P. DEPRE: I'd like to talk to you about successful financial management from an underwriting perspective. I view the job of the underwriter as the lever to balance the theoretical pricing of the actuarial and the market-driven pressures that your sales organizations experience on a daily basis. The problem with the actions taken by underwriters usually becomes apparent when you perform an experience study and the actual results vary widely from expected. Upon further analysis of the results, the actuary usually wants to know how the underwriter strayed from the pricing or "how did you get *here* from *there*?" I hope to share some thoughts with you today as to how underwriting actions can impact financial results dramatically and the need to better monitor underwriting actions.

The first item I think you should look at is how a pricing process organizes your company. Where can variance be introduced to that process? I'm sure if you talk to 10 different companies, you would probably get 10 different variations on the pricing process flow.

(1) Does the authority and information flow go from the underwriter directly to the broker then to the employer without any sales representative involvement? In this situation the underwriter would have the ability to discuss the missing, incomplete or unclear information with the broker and develop a better understanding of the risk.

(2) The second, and probably more common structure of the pricing process, is information passing from the underwriter to sales representative. Then from broker to employer with the underwriter have no direct contact with the broker or employer. There are two places where you have a chance of variation in your product with this structure:

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(a) Do these intermediaries, your sales force and brokers, introduce any filtering or variance into the request for proposal (RFP) process? By filtering I mean the information that the incumbent carrier releases on its letterhead is not what you receive. Was the information manipulated so that some key items are missing or were they modified? Can you not really understand what's going on?

(b) Do the intermediaries modify the proposal, prices or plan design that was offered by the underwriter prior to the presentation to the employer? This can often happen because the underwriting/rating and proposal-generation systems are two different, disconnected systems that permit modification to the actual document presented to the employer.

The unfortunate reality is that the quotes with the biggest variance from formula pricing are the ones that have the highest close ratio with the broker, who has a large block of business. And this is the same broker who is going to give you a lot of business if you just do this one case to get the thing started off. So, addressing this one, small, operational-systems link may be worth the effort to help with better financial management.

The next item you need to remember is underwriting is an art, not a science, which is transacted by individuals who bring their own assumptions, thoughts, experiences and biases to the process. Some of those biases come about as a result of marketplace competition.

Another area of influence on the underwriter is corporate objectives, what does the underwriter think is the current corporate division or product-line focus. During the first six months of a year they are hearing that profit, profit, profit is the objective and they should be conservative in their adherence to published rates and guidelines. Then, around mid-year someone in management realizes that the revenue/new sales curve is being impacted by the profit-focused, conservative behavior and the company has an analyst's meeting approaching and analysts recently have been focusing on growth versus profitability. Immediately revenue, revenue, revenue becomes the primary objective. People are expected to constantly switch back and forth between objectives, and there's usually not a common understanding of the message that's being delivered. You're going to have some people that think sales emphasis means you do anything to just get sales and others who will be more conservative in their approach. Who is right and how does this impact financial results? How do you track the individual underwriter's interpretation of the message in actual results?

Another place of variance is underwriter and/or sales rep turnover, particularly on manually rated business. When underwriters or reps start with a new company, one of the first things they do is mentally compare the new rating and underwriting manuals to their prior employer's manuals. In this review, they determine that the new company's factors can't possibly be right, as they vary greatly from their

previous employer's factors. They may think that their previous, large company had a credible block of disability business and, the company had industry factors based on their experience. Now, being with a smaller carrier, their factors are totally different than the factors used by their previous employer. Therefore, the new carrier's factors can't be right, so they must use factors closer to the previous employer in underwriting business. The other item that impacts an underwriter's perception of a particular carrier's rating factors' accuracy is the results of pricing studies that are done and presented at industry meetings. If you ever looked at some of these presentations, the data shows that factors vary widely. How does an underwriter know which factor is correct?

One also must consider plan design exceptions that underwriters make when you set the parameters for constructing your pool of business. In this process, you probably make assumptions that there will be minimal exposure to liberal plan-design characteristics, for example, integration provisions and elimination periods. You may assume you are not going to have a lot of 70 percent benefit primary, only integration plans or plans with low elimination periods in the portfolio. Some underwriters may not think that these items are poor plan design characteristics and may make exceptions to the underwriting rules frequently. Who's monitoring these underwriters' exceptions? How are the exceptions going to impact the mix of your business in your portfolio? How will the exceptions impact your expectations?

Occupation coding is another area that can introduce significant actual/expected (A/E) variance. Some companies have sophisticated occupational coding mechanisms that are based on Equal Employment Opportunity Commission (EEOC) codes. Others only code on a white collar/blue collar basis or white/grey/blue variant and leave the individual person's determination up to the people doing the census review. What are the qualifications of the person doing the coding? What direction is given to the person doing the coding? Do they code white, grey or blue based on what they know about people who work in various occupations? An example is the job title "technician". A person could be coded as white, grey or blue based on the industry and a coder's knowledge of the industry. This coding can greatly impact pricing and, you need a defined set of rules to limit variance in this process.

Industry coding could also be a topic that causes variance, particularly regarding white-collar or executive carve-outs. Is the industry factor that's shown in the rating manual based on covering all the employees of a particular industry, or is it based on the employees that are typically eligible for LTD benefits? Should the underwriter modify the factor if only white-collar employees are to be covered? It is critical that the underwriters understand what assumptions were used to develop the factors.

Pricing discretion is another item that must be considered. Where does the authority to use discretion reside? Is it only in underwriting or only in sales, or does it apply to both of them? Can both discount the same case? How far do you

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let them come off of the formula or manual that comes out of your system? How do you relate new business discretion to renewals to get back to your starting point, where you want the charged to manual/formula ratio to be over time? Do you permit discretion in renewals? How do you monitor it? Is it by segment or by plan-design characteristics?

After the all the adjustments are made to the manual component, you get into the experience-rating component adjustments on cases that have some credibility. Sometimes you talk to underwriters, and depending on how good the relationship is with the sales force, they may think the credibility formula that you have is too high or too low and they'll adjust it to get the quoted rate closer to the competition. In addition, the underwriter may adjust the termination-rate assumptions in your reserving programs for particular claims based on undocumented conversations they have with the sales representative or broker. It may be that there are claims that you don't have a diagnosis for, but you are being advised they are not severely disabled and should be returning to work shortly. In this case the underwriter may modify the table reserve to reflect a reserve equal to a limited number of future benefit payments. I would bet that when these adjustments happen, the underwriters are adjusting the reserve amount downward for potential early recoveries, but they are not increasing the reserves for claims that have no chance for recovery or termination and will endure for the maximum benefit duration. Steve also talked about offsets briefly. Sometimes in a RFP you only receive gross benefit information with no offset or net benefit information. How do underwriters adjust the benefit for offsets when setting reserves? Are there assumptions that underwriters make if they know the diagnosis, or if they have some information as to what the offset should be? Does the actuary provide underwriting with an adjustment process to make sure that underwriters make these adjustments consistently?

One of my favorite items is a shock claim. I think if I walked around a room of underwriters and asked them what shock claims are, I'd probably get as many definitions as there are people in the room. The most common definitions I usually hear are claims with higher monthly benefit amount than the average or claims in which the disability was the result of an accident. If the claims are considered "shock" claims, the underwriters either take the claim out of the experience analysis or introduce some level of pooling to reduce the impact of the shock claims. How do you monitor these actions and the impact they have on expected pricing?

Another factor impacting underwriting decisions is missing data or incomplete information. I attended a recent Group Underwriters Association of America (GUAA) session that presented an interesting conclusion on this topic. Underwriters were given the specifications on three large cases with varying levels of missing information and were asked how the gaps would impact their underwriting decisions. Three underwriters were asked to present their conclusions as the session. The amazing conclusion was that although all of the underwriters

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went through long dissertations about how bad the information was, none of them would decline to quote the risk. They all developed assumptions to fill in gaps and develop a proposal. Are actuaries providing some guidance on the assumptions that are used for adjustments on a case-by-case basis by the individual underwriter? Once again, I think it's critical that you understand and measure the differences between formula, underwriting, quoted and sold rates, and you have a method to monitor and manage all these adjustments.

Some other items that I think you should consider with regards to pricing discretions are:

- **The maximum loads or discounts that would be applied per case**
- **The level of discretion reflective of characteristics that would point to a better risk**
- **Annual aggregate limit on discretion**
- **Base rates loaded for discretion programs** (If you look at some industry surveys that were done, it's probably a 50/50 split, some are loaded and some aren't.)
- **Management of the discretion program** (Do you actively manage the program? How often? A recent GUAA survey indicated that 60percent of the companies that have a discretionary pricing program do not have an active program to manage the business. If you do manage the program, how do you penalize abusers? Do you stop the use of discretion?)
- **Discretion for new sales and renewal** (If it applies to renewals, how do you ever get back to the starting place?)
- **Plan for getting back to starting point**

Pricing new business is a pretty complicated process, which introduces considerable variation in the pricing process.

I was also asked to suggest some metrics that you should consider for risk selection and pricing management. Some suggestions I have are:

- Find the number and percent of exceptions that are made from your standard underwriting manual by underwriter. Are the exceptions tracked in some system when the cases are sold so you can easily track them? Often you find the documentation sitting in a paper underwriting file or someone's handwritten notes so, they're not being tracked anywhere.
- Conversion of underwriting rates to formula rate ratios by the underwriter measures the underwriting variance.
- Quoted-to underwriting rate ratio measures any sales variance.
- Calculate sold-to underwriting rates and sold-to formula rate ratios.
- Underwriting audits determine the frequency and severity of adjustments to determine who your outliers are. Audits may point out some opportunities to do some training with your underwriters or actually to cut back on their authority.
- Sold-case audits can also be used to determine if the causes occur in the field.

Once you develop these capabilities make sure you monitor your outliers. Who is introducing the largest variance? Once you determine that, use the data to modify and manage future behavior. This may involve reworking your pricing pool parameters, underwriting and pricing authority levels or implementing other operational changes to your processes. Your goal is to remove the variation from the process or implement methods to insure that adjustments are done on a consistent basis. I would also use the results to facilitate creative feedback sessions between actuarial, underwriting and claims to create a greater understanding among all parties of the items that have the greatest impact on financial results. I've sat in on a couple of conversations where you get claims and underwriting people in a room and, just like the actuaries say to the underwriters, what did you do to my rates, the claims people ask the underwriters how they expected businesses to run profitably with plans designs that were offered.

I hope that I have been able to highlight some of the operational variance that underwriting can have on your expectations and convince you of the need to put processes in place to monitor. Measure and manage the variance with a strong communication platform to all parties working to achieve financial success.

FROM THE FLOOR: Jim, you had some comments from underwriters that their formulas were not metric. They need to underwrite to the metric rather than underwriting to get the right rate. I'd be interested in your comments on that. For the panel, there are a lot of metrics around. How do you know whether your pricing is competitive? What about metrics around sales productivity and distributing?

MR. DEPRE: I do not think that an underwriter's decision on a case-by-case basis is impacted much by metrics that are currently being measured because the results are not often shared with the underwriter on an individual basis but primarily on an aggregate portfolio basis. For instance, the reported metrics state that sold rates in the aggregate are running at 90 percent of the manual. I think that the underwriting pressure is more from a sales perspective to try to write and maintain business that drives the underwriter's individual case decisions versus what metric requires. There are two components that need to be measured to fully understand what is going on, one is the sales discretion, and the other one is the underwriting discretion. I would bet that that percent of manual probably is, for the underwriting piece, very under managed. I find it odd that someone would make the comment that the underwriting quoted-to formula rate metric is driving underwriting behavior to be conservative, given that not many people measure or manage that metric.

As far as sales productivity, metrics are usually within the sales organization. What I normally see is aggregates on RFP's received, quotes issued and declinations. There's some measurement on close ratios by sales representative, but then there's usually the discussion about what is the right way to measure close ratio. Some other challenges I've heard are:

- Do you measure close ratio as the percentage of cases sold versus RFPs received, or do you subtract declinations out of the denominator?

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- How do you measure it if you offer multiple quotes on the same group? What number do you include in the denominator? Is that one quote or is it seven quotes? I tend to think it's one quote and would only include the number of groups or policyholders in the denominator versus plan options.

On sales productivity, I always tell people you should really have a well-defined strategy of what you want to write and measure it to who's executing that strategy versus who is quoting the most business.

MR. STEPHEN R. TENAGLIO: How do you make the CFO happy? I think it goes back to what Steve said at the beginning: no surprises. How do you build that plan? How do you understand if what you think is going to happen is really going to happen? When you're dealing with long-term disability, that's what everyone's talking about. You tend to think it's a long-term product, but we're dealing with it today. The CFO loves pricing, loves the underwriting, but they're really living in "what's my earnings today." You have to try and understand that and help them understand what's going on. I guarantee at some point in time one is going to run in your office and say, "Where's my earnings, how come they're down, why is my loss ratio so high?" You have to be able to tell them that everything is OK or explain what is going wrong. You have to have confidence in what you are telling them. To do that, you will need to build that plan or expectation so you have no surprises.

Why look at the calendar year? First of all, from an operational performance standpoint, it's the method of choice. Operations are usually in a state of flux; they're changing all the time. What was true today wasn't true 12 months ago and it won't be true 12 months from now. The pricing statistics on the business from 2001 aren't necessarily what should be expected anymore. Know how that is impacting the 2001 business as well as current-year earnings. Secondly, looking at calendar year will help tell you where you are going and what is going to change. It allows early recognition of the developing trends. The sooner a bad trend is highlighted, the sooner someone can get to work to right it. Looking at the calendar year also provides the direct link to the income statement and earnings. This is what's being reported to the outside world. By building a calendar year earnings plan from known metrics and measuring actual results against the expected, you will have a much easier time explaining your variances in earnings.

We saw at the beginning of our presentation some of the items in the income statement. I'm going to go back over them just to say it one more time. Pardon me if I put investment income in with revenue, but revenue is your first major one. You have sales, persistency, rate action and net investment income. All these things are going to drive revenue. You need to have them planned for to know what revenue will be doing. Are you hitting the sales number, are you hitting the persistency number? Is what was thought to be the sales actually going to come in as premium dollars? Many underwriters and salespeople have overestimated the amount of business they've sold. You have to put these items out there as plan metrics and

track actuals against the expectations.

Next is incurred claims, or loss ratio. The loss ratio is going to have the biggest impact on earnings. This is really where most of the period-to-period variance is seen. We'll talk a little bit more about it later, but once again, don't just look at the current incurral year to make the projections. There can be a lot of business out in the tail. Know how operational performance is going to impact the new incurrals as well as the old. Project the tails out straight and analyze them on a diagonal. This shows what is going to happen in the calendar year.

Next is the expense side. Talk to the controllers and make sure they're really managing expenses. Make sure they're hitting the expense targets and that those targets meet what is being used on the pricing side.

Lastly, this leads us to earnings. You need to know what your profit margin is. Is it what was expected; are you getting an appropriate return on capital? You want to be able to say that the current level of earnings is in line with what was expected when the business was priced and underwritten. The only way to do this is to build the calendar year expectation from each of the incurral year expectations.

So it's all in having the right plan or expectation. My presentation will focus more specifically now on loss ratio, or incurred claims, as this is the biggest driver of earnings variances. Without a plan for loss ratio, you never really know if things are going good or bad. Just because earnings targets are being reached does not mean that the underlying business is still good. It depends on which direction the earnings are going. You have to understand when good results are sustainable, or when they are a result of something else more short term, and be able to show it to others. This is achieved by building an expectation based on the metrics that everyone else is committed to. Get out of your office. Talk to the operations and find out what sort of activity they expect to have for resolutions and what sort of activity they expect for benefit offsets. Talk to the salespeople and underwriters. Find out what loss ratios they're selling new business at. They need to commit to metrics so that a projection of the future can be made. Any projection will only be as good as the underlying metrics used. You also must make sure the information given is consistent with the company's earnings goals at the end of the day. When projecting incurred claims, the areas to focus on are net new claims, net resolved claims, offset and/or net benefit changes, duration change, paid claims and changes in IBNR. I now will talk about each of these in a little more detail and provide some of the key metrics behind the projection of each.

The first key area of focus is new claim volume. It will be driven by the incident rate pick for the business and the volume of the business predicted. Many claims take longer than a year before they are reported, so allowances must be made for claim reporting patterns. You also want to know what the average reserve of a claim will be when it appears for the first time. Tracking actual experience against these metrics will give a deeper understanding of new claim volumes, and better define

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where additional analysis should focus. You can start to address questions such as, "Is the average size creeping up? Is it because of increases in salary, or is it because we're changing the demographics of the business we're writing?" The same sorts of questions apply to incidence rates and reporting patterns. Build the expectations and measure actuals against them. Next is net resolved claims. Look at the number of claims resolved versus number of claims reopening to get net resolutions. To build the projections, it will be necessary to have the average expected number of net resolved claims per month and the average size of those claims. Information needs to come from claim operations. How is their planned activity going to impact resolutions, and therefore, earnings? Are they reorganizing? Are they using new systems? Have they improved training? Operational performance can fluctuate greatly from year to year, and you will need a strongly built expectation to communicate variances from it.

The next area where operations can have a significant impact is on the offsets applied to claims. This is often overlooked, but an operation can greatly reduce liabilities by getting people Social Security awards, and therefore dropping the net benefit for a claim. You must build the expectation of what they will be able to achieve. It will be based on items like Social Security award rates and the net awards to be received.

The next item, duration change, is more of a housekeeping item. The claims that are going to remain open on your books are going to change reserves because they're getting older and have one less period of discount. Understand how the reserve factors change, and apply that to the open claims to see the resulting change in reserve. For building an expectation around paid claims, look at the average net benefit. You will be able to start to track whether it is going up or down and then look for explanations. Projecting the IBNR change is just making sure that you've got the right pattern of how new claims will be reported. The IBNR change should follow along with how new claims are being reported, offset by the incurrals for the new month's premium.

Those were the main points of focus, but there may be other things to consider as well. Sometimes the number of processing days in a period can make a difference. It's not a big deal on the premium side, as premium usually comes in once per month regardless of the number of days in the month, but on the claim side the more processing days, the more time there is to load new claims and resolve existing claims. This will magnify the reserve change in months with more than the average number of days and shrink it in months with less. The reserve change also might be affected by seasonality. To me it's one of those interesting words. I know there's seasonality, but I've never really seen seasonality. I've always found underlying effects that have been the real cause of the "seasonal" swings. Depending on your situation, you may be impacted by the reinsurance programs you have. You will probably want to make separate projections for direct business and ceded business.

When looking at calendar year information, you are basically dealing in the short term. You will still want to keep your eye on the long term, though. That is why projections will need to go out a few years. See if the string of calendar-year projections reproduces the expected incurral year projections. If pricing says the expected loss ratio of new business is 85 percent, the calendar-year projections should not show something much different than that. Lastly, be prepared to slice and dice the projections, as well as make adjustments quickly and efficiently. There's never going to be a single way to look at the book of business. There are lots of different segments to look at and different ways to pick them apart. Your plan needs to be able to adapt to this sort of analysis.

When trying to understand changes in reserves and the impact on earnings, one of the things that often gets overlooked is the change in overall adequacy within your reserve basis. Take a growing book of business. People seem to overlook that the earlier the duration of the claim, the more adequacy there is in the reserves. As a book of business grows, the average age of the claims is reduced, and therefore the overall level of adequacy in the reserve base is increased. This will be a drain against earnings. The opposite will be true for a shrinking book, as adequacy will be running off the reserve base and into earnings.

It is one thing to build a plan and track actuals against the expectations, but the real benefit comes from communicating the findings and driving change within the organization to ensure meeting and exceeding the expectations. Identify emerging trends and communicate effectively with the owner of the metric. Remember, you are not the owner of the metric, but the user of it. Make sure you get back to the underwriter or the claims manager and say, "Hey, this is what we agreed the metric assumption would be, but we're not hitting it. Why not? What is being done to fix what's wrong?" The more ways you can present the data, the better chance you have of showing a clear picture of any problems. At the end of the day, if the metric really can't be met, you have to reforecast the plan on the submitted new metric.

MR. SCHOONVELD: We have sufficient time for some questions.

MR. ALEXANDER D. MAREK: Steve Mitchell, you were talking about interest rates and portfolio versus new money, and I was wondering how much work you do projecting actual earnings needed? I know that I'm going to be selling some business or cut some business on the books. I'm going to be incurring X million dollars of new claims approximately, but not every new claim is going to need a new investment because prior claims have high conservative reserves set up. So how do you deal with that issue in terms of setting a new money rate for pricing?

MR. MITCHELL: If I think I understand the question, let me share a couple of components of it. When we do the basic pricing analysis, we clearly make the assumption based on new money rates and what we see the investment environment's going to be to kind of get a grip on the cost. Within the investment division, there's a lot more work done. I think that would get to some of the factors

we talked about that involve where the portfolio is going, and where the portfolio has gone relative to the prior pricing assumptions that would be the components, as well as the flows. What assets are maturing? What's the cash flow laid out and how are the changes going to be netted in terms of what the portfolio is? Also, look to long-term investments versus that refunded out of current cash and how that change is going to be going. So there is a lot of that work going on. My experience has been that the impacts are brought more into the planning process than into the pricing process, but that gets at part of the kind of feedback loop that we've covered. There are other things that enter into the picture, such as multiple products. There might be some cash, and the other parts of your question could expand to what's the investment philosophy around capital and surplus? Is that different from the underlying reserve balances? For the most part, there's some variability along that. We usually kind of stick with what do we think, what's our best read on the rates and where do we think the new money rates are going to be in a kind of longer-term strategy that the investments will do.

FROM THE FLOOR: Jim, you had some comments from underwriters that their formulas were not to the metric. They need to underwrite to the metric rather than underwriting and getting the right rate. I'd be interested in your comments on that, and for the panel, there are a lot of metrics around. How do you know whether your pricing is competitive? What about metrics around sales productivity and distribution?

MR. DEPPE: I think that the comment that they build the formula so that it is impacting underwriting decisions on a case-by-case basis and based on the stuff that I know out there, that metric is hardly ever really fed back. Other than on an aggregate portfolio basis that says that you're running at 90 percent of manual. I think that the pressure is more from a sales perspective to try to maintain business that drives the individual case decision versus where that metric sits. There are two components: one is the sales discretion and the other one is the underwriting discretion. I would bet that that percent of manual for the underwriting piece is probably very under-managed. For them to make a comment that that's driving your behavior to be conservative, I just find that as odd.

As far as sales productivity, it's usually within the sales organization. What I normally see are aggregates of quotes and volume of productivity coming in the door. There's some measurement on close ratio by representative, but then there's usually discussion about what are the active numbers. Some other challenges I've heard from some people on close ratio, and you measure it as if you close ratio on the same group. Is that one quote or is it seven quotes? I tend to think it's one quote with close ratios by group versus plan design. On sales productivity, I always tell people you should have a really defined strategy of what you want to write and measure it to who's claiming on that strategy versus just pure sales bonus.

MR. TENAGLIO: I have heard that response about people managing to the metric and I think there's some truth in it. If the metric is what you consider when you

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look at the whole block, it's unlikely that in a given year the block as a whole will change its dynamics sufficiently enough that you end up well off that metric. But as the block gets segmented into smaller groups, the individual groups could have specific characteristics that would cause it to differ from the metric. You have two issues: one is how a metric needs to change as it gets applied to smaller groups and two is how far down to push the metric. As you push a metric down into smaller and smaller segments, adjust it for the changing demographics of the segment. When the level of expected variance from the metric gets to be out of your comfort range, that is when it has been pushed down too far. This will help prevent managing to a metric from giving you improper results.

On the other question, I think Jim hit it, close ratios. Even if they have some deficits that Jim has mentioned, such as whether they're segmented by customer or if somebody ended up with multiple quotes. One of the things most people find difficult to separate is that you may have more than one book of quoting on a case and the same customer. It may not be consistent year-to-year, but at least you'll have kind of a benchmark measure of relative trend around it, if you have kind of good sales. We didn't cover much of that. I think it's more a matter of time rather than focus. The revenue issue is clearly a big driver to set appropriate metrics around. What you expect out of activity from your sales force and your sales partners and what you expect on terms of close ratios, which are impacted by both the level of activity and the marketplace externally, and of your own internal processes.

MR. SCHOONVELD: It's a really good point in that you can't push the metrics to individuals down in the ranks too far because people will manage to a metric and shop in front of them. That's just the human nature. So when you talk about these metrics, a lot of them need to be of the upper aggregate level where you don't have that chance, where it's OK to manage to that metric a little bit. As you start to break it down into finer and finer details, I think you really lose the importance of that metric and whether it's the right metric. You keep it up as high level as you can and then figure out the light weight to push it down into the forces.

MR. SCHOONVELD: I think one of the things you were trying to say is that with metrics you are understanding what's driving your business from a claims perspective or an expense perspective, etc. On the group side, we came up with these as items we think you should look to be indicators of what could be driving your business.