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The Product Development Process – Getting Your Product to Market Quickly

Track: Product Development

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Panelists: Karen J. Edgerton
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Timothy C. Pfeifer

Summary: This session presents what is involved in the product development process and the resources you can use to get the product to market quickly.

MR. CHRIS IAN NOYES: Tom Kalmbach is assistant vice president at the Hartford. He joined the Hartford in 1997 as a product development actuary for the Middle America Marketplace. Currently Tom is responsible for pricing the individual life business, performing experience studies, managing reinsurance relationships and performing miscellaneous financial analysis. He has worked on assessing a number of acquisition targets, including the recently acquired Fortis business. Tom serves as the illustration actuary of the individual life line of business. Prior to the Hartford, Tom was at Tillinghast Towers Perrin from 1995 to 1997. He completed a number of life insurance product development projects as well as completing and auditing embedded value calculations. Tom gained a solid foundation in actuarial modeling and other financial management projects, including various expense analysis and regulatory audits. Prior to Towers Perrin, Tom was at Connecticut Mutual from 1989 through 1995.

Karen Edgerton currently serves as the regional head of pricing in the northeast for ING Re. Her responsibilities include pricing, mortality consultation and account management for the northeast clients. Prior to joining ING Re a year ago, Karen worked for Lincoln Re supporting the pricing and mortality research related to

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group life reinsurance. She also supported pricing and product development work for group life, disability insurance, group disability and terminal funding annuities throughout her 15 years at Lincoln. Karen currently serves as co-chair of the SOA Group Life Experience Committee.

Tim Pfeifer is a consulting actuary with Milliman USA in Chicago. Tim has been active in the areas of life insurance and annuity product development for over 23 years and has worked with most life insurers and reinsurers in the market on new product ventures. Tim will be discussing the nuances of product development from a consultant's point of view. I should point out that since we're talking about getting your product to market quickly, I think we have a great panel from a consultant's point of view, a reinsurer's point of view and a direct writer's point of view.

MR. THOMAS P. KALMBACH: One of the things that I got out of the secondary guarantee discussion at this meeting is that our life of pricing and product development is a whole lot more complicated than it ever was before. That makes it much more difficult to get products to market more quickly. What I'm going to try to do is give you an overview of the product development process as we see it and then also point out some of the areas which I think are critical to getting products to market quickly.

We're going to identify a couple of the pitfalls, Karen will talk specifically about reinsurance assistance and then Tim will talk about consulting assistance as well as provide insight into the annuity product development process.

I've laid out nine steps of a product development process. I'd say this process is more of a cycle rather than a linear process. Product development is imperfect. It's based upon imperfect information and understanding of your marketing objectives. It's used to determine which product you should actually choose and develop. Along the way, you have to reassess what you're building and determine whether you're following the right course of action or whether you need to change course. In having a product come to market quickly, it is critical to use the first three steps, which are the idea generation, the idea approval and setting the priorities for product development efforts, and, most importantly, for a given product development project setting, the marketing and financial objectives right upfront.

At the Hartford, as I imagine in your company as well, ideas come from a number of sources. Ideas come from the field. They come from the last case set that I worked on. They come from the strategic direction of where we're trying to move the company and what products we're trying to offer. They also come from exception cases that come up when we look at why didn't we get a case. It is a little bit of reverse engineering as far as what other companies are offering in the marketplace. What we try to do is compile a list over the course of the quarter. Twice to four times a year, we'll get together, pull out that list and say, "Given this

list, what projects should we be working on over the next year to fulfill our strategic objectives?" These are the criteria that we use to evaluate which projects we're going to undertake to have a strategic fit. Do we have the right distribution source to sell the product? Do we think we can get the right price for it? Do we understand the risks, and if we don't, what are we going to do in order to help us along the product development process? Do we think we can make money at it? Given that it might be a new project, how many resources in the organization are we going to consume and implement in that product? Consuming those resources will limit what additional projects we can implement along the way. We're trying to grab all the ideas together and filter out the ones that meet our strategic fit. We believe we can meet our sales objectives and earnings objectives and develop a plan for the rest of the year for those product development projects.

Given that we get a lot of ideas from the field and external sources, one of the things we do in this process in order to speed the implementation and execution of the projects that we choose to pursue is clearly identify which projects make the final list and which projects have not made the final list. We generally will communicate that to our field force and other constituents within the company to make sure that they understand that we listened to the ideas that they brought to the table, and we evaluated them. Then we can say that although they're good ideas, they're not ones that we're going to pursue at this time. That helps when that idea comes back in again and someone asks, "Why aren't you doing this?" We can say we've looked at it and at this time we're not going to pursue it.

The idea of approval and priority setting is the second step of what I think of as the critical process. We try to develop a new cost-benefit analysis (CBA). What are the benefits of doing the project? What are the benefits to earnings? What are the benefits from a sales perspective? What are the benefits of maintaining the competitive positioning or shelf space within the areas where we compete? What we try to do is look a little deeper. We might do a mini-profit analysis, as far as what profit returns we can get from doing the project. We also, alternatively, might look at a competitor's product that we'd like to emulate in the marketplace and reverse engineer that to see what type of profitability we might be able to get. We also look at the impact of not doing it. Sometimes the risk of not doing a rate improvement for, say, a term product is a risk of losing sales and losing potential earnings, so we also look the risk of not pursuing this project. At this point we're also trying to, as I mentioned, determine what kind of resources we are trying to consume. We're trying to more clearly define the scope of the project as far as what system resources we're going to use, what marketing resources we're going to use and what the changes are that we're going to need to make in the sales system. We're thinking ahead right from the start as far as what our capabilities are of actually implementing this product going forward.

The marketing and financial objective step is the most critical step to consider to be effective in product pricing, product development and maintaining a schedule in

order to get your product to market quickly. This is probably the step that has the greatest sense of imperfect information. For instance, we look at the competitive landscape. We look at what competitors' products are out there, how those competitive products are designed and where we want our product to compete. We look at the sales concepts that our sales force is generally accustomed to selling in and how we would design the product to best meet those sales concepts. We look at who in the marketplace is doing well (and doing well is relative, I think, to sales and earnings). We are trying to get a better look in that group of competitors. Where do we want to sell and where do we want to position our product? The difficulty here is that the competitive landscape is never stagnant; it is always moving. We also try to anticipate what's going to happen to the marketplace and choose a competitive positioning that we think is appropriate, given that the market is likely to move.

We also try to evaluate what makes a product good. Is it a secondary guarantee product? Is it low price? Is it flexibility to pick your guarantee periods? Is it higher cash value? What are the primary and secondary measures that we're going to be looking at to judge whether a product is good or not?

Understanding these market objectives and financial objectives is important. We do that at quite a senior level of the organization to make sure that they have commitment to the marketing objectives and also that we give them a fair estimate of what the profit potential is and what risks to operational resources as well as financial resources are associated with pursuing the project. We also consider potential risks we might need to take in order to have that competitive position and what steps that we would need to take to mitigate some of those risks or manage those risks going forward. One critical element of this discussion, I think, is to really have an open discussion, given that marketing objectives and financial objectives are generally in conflict with each other. What are the trade-offs that we're willing to make? Is it a trade-off that we're willing to make if we're targeting the number 1 competitive positioning? If we can't get to number 1 to meet our profit objectives, are we comfortable backing off that competitive positioning to number 2 or number 3 or number 4, or is the preference to change those financial objectives and move the financial objectives down?

We look at products as a three-legged stool. We look at it from a consumer perspective, so backing off the competitive positioning would be to back off on the consumer leg of the stool—make that leg a little shorter. In another potential situation, we would be willing to back off on compensation. In this discussion, it's very important to get those trade-offs on the table and to understand which of those trade-offs management is comfortable with, to really understand the objectives of this product development effort and how they meet the strategic objectives of the organization.

Without this what you'll find, and I think we've found it from time to time in past projects, is that when you're in the middle of a project and running into some difficulties with those objectives, it takes another two weeks or three weeks to work out what path you should follow, and that extends the product development cycle, which makes it more difficult to bring your products to market more quickly.

As I mentioned, one of the things I took away from the secondary guarantee discussion is that these products are much more complex, particularly the secondary guarantee products, than many of the products that we've priced in the past. One of the reasons for that is the speed to market. What is the number of iterations that you're going to need to do in order to get to that final product design? One of the objectives should be to minimize those iterations. At this point, when we look at the pricing iterations, we already have a process where we develop a product outline, which generally weighs out all the details of what we think the product will look like, even though at the end of the day we really don't know all the exact details. We try to give some idea to our system people, our marketing people and other members of our development team as to what we think that end product is going to look like. This is even before we've begun a pricing iteration.

At this point we have had development of initial systems specs. There are some gray areas in the systems specs that we've developed. We use a bubble chart. We use five bubbles to say whether we think this system spec is pretty much final or whether we think that it's still in the development, so that we can give our systems people an idea of what types of modifications they're going to need to be able to make, whether the product that we're designing fits well into the current infrastructure or current capabilities of the system and then what the magnitude of any changes might be and how complex those changes might be. We want to get our systems people looking at—given that we have to make some modifications—what modifications or design constraints will help us get the product to market more quickly. We need to determine that we're not designing a product that if we go down one path, it would take two weeks to build the system modification, but if we went down another path it would only take one week. We want to know what those trade-offs are from our systems people so we're engaging them, even before we're doing that first pricing iteration, in a discussion of what the system capabilities and ideas are with regard to the product design.

We are doing pricing iterations, and one thing that we want to do is try to come up with an initial design to validate some of the cost-benefit analysis that we have previously done. This is a critical item. This is the first checkpoint back with senior management to say, "We told you we thought we could build this with these marketing objectives and with these financial objectives. You told us these were the trade-offs we could make." We go back to this checkpoint meeting and say, "This is where we are. We'll give you a better idea of what we really think we can do. Is that acceptable? If not, which direction do you want to go in?" We have a discussion on which direction we want to go in: more competitive, less competitive;

more profit, less profit; more comp, less comp; and more complex of a product design, simpler product design. Those are some of the items that we go back and discuss in this checkpoint meeting.

The fifth step is contract drafting, rate development and risk analysis. At this point we're early in the process still. We're working on drafts in the contract to make sure that all the components of the contract are upfront because we've found at times that until we have the contract written, the design is still generally in flux. Once we start putting those words on paper in the contract, we sometimes find that it doesn't work. We change our design, which changes some of the system specs that come out, and that changes some of our pricing iterations and our ability to meet our marketing objectives. First we'll start drafting the contract and getting it to what we think is a pretty final form. We'll have another checkpoint meeting after we've done more of the testing of the product design. Do we test single-pay scenarios if it's a universal life (UL) design or a variable life design? Do we test 10-pay scenarios, or 1035 scenarios? Do we test the design for 85-year-olds? Do we test it for 20-year-olds? Given that we thought we had a design that worked, does the design now work across a broad spectrum of ages and risk classes?

We're also going to do another checkpoint on the competitive analysis. We knew the competitive landscape when we started. We're now probably a month or two months into the process. What has happened to the competitive landscape today? Are we changing our expectations about where that competitive landscape is going?

We are also in the process of developing system specs and designing the system in a more formal way. One thing that we're also identifying in this particular situation is the risk analysis work. I think you heard in the secondary guarantee discussion the amount of stochastic testing that some companies may do in looking at UL products for secondary guarantees and other products and that they don't need very substantial risk analysis. I think one of the difficulties is that this is probably a newer element in the product pricing cycle that hasn't generally been necessary with some of the more typical products of the past. It's this type of work that creates some uncertainty in just exactly how long that product development process is or where you might need some assistance in completing some of the work in risk analysis. To complete this risk analysis, you almost need to have the product completed to do the risk analysis and then look at it. Do I need to make some changes given the results of what that analysis is showing me? It almost adds another iteration, so you want to be making some progress along the way to start understanding how your product will work under a variety of interest scenarios and mortality scenarios and really understand what the tail risk or maximum losses may be. Once we complete all that, we'll be looking at another checkpoint meeting. We will say, "I think we're done with the pricing. Here's what we think the financial results will be. Here's what the competitive positioning will be. Do we have a green light to continue and execute the implementation plan?"

MS. KAREN J. EDGERTON: I'll be talking a little later about reinsurance, as we provide services for product development efforts. However, we also play a role in the whole process in terms of giving reinsurance quotes. Tom has done a good job of explaining the idea generation and trying to identify trade-off scenarios. What are you really firm on? Where are you willing to maybe give a little? That's a great process to go through before you get the reinsurer involved, and that can help us more quickly turn around reinsurance quotes. The better you have defined your product and your specs, gone through that process and weighed the pros and cons, the more quickly we're able to respond. We do find ourselves in situations where you as a direct writer have given us the reinsurance quote, and we seem to be stalling the process, but if there's a lot of information and a well thought-out plan, that can help us move along more quickly.

Also, regarding the risk analysis piece that Tom talked about, we're finding that that is definitely an area that's being explored more often than it was in the past. As Tom described, I think the UL secondary guarantees really pointed that out, but that's happening on term products and on other products where we're trying to understand the true drivers of our profits, where we are at risk and by how much risk, and we're doing those pricing iterations. I would emphasize that that's very important in our jobs currently.

MR. TIMOTHY C. PFEIFER: I would observe the companies that do product development well are not worried about the number of products that they develop in a given time frame. They'll have years when they don't develop many and other years when they develop a lot. It is reaction to their marketing needs, production needs, etc. I do see one trend in the industry, which is that companies that do product development well are starting to get multiple disciplines involved in the process much earlier than probably they had in the past. The systems people are involved earlier. The investment people are involved earlier. The reinsurers are involved earlier. Corporate is involved earlier as well. I think that's a function of the products getting more complex and the need to make sure that everybody is on board with the process.

It's important also for companies to build a product development culture within their organizations. The cultures can vary, but it's important to build a structure that has some flexibility to it but that definitely has some sort of structure. That may mean that on every product development project, you appoint a product champion, who is a senior level person that can make decisions, gain the respect of various constituencies, etc. In other cases it may have to do with your culture of documentation. I've seen companies that have the product book for a given product that tells you everything you need to know about why decisions were made about that product. Even though people usually laugh at it, it ends up being an incredibly helpful source of information three years later when you're trying to decide why you did what you did.

On the issue of pricing iterations, pricing assumptions are very critical to not losing time in the process. Some companies, and I'll allude to this later, have a fairly good process of doing regular experience studies. Other companies are doing assumptions on the fly, which allows for a lot of dispute later when the results aren't coming out the way that somebody wanted them to come out. Having a tight rein on assumption setting is important.

One thing I would add to is field input. It's one thing to get input from your internal home office, sales and marketing people, but what about getting input from people that are on the front line selling the business? They are becoming more important, although I would add that in some cases don't make dramatic changes on the basis of what you hear from a few field representatives. Often, companies bring in their heavy hitters. They have agendas, and they have particular pet products they like that are not necessarily representative of the entire agency force or what you would want to do going forward. I think their input is critically important to get a sense for what's going on in the market.

Lastly, I would say that on the contract drafting, try to make your forms as modular as you can. I know that many companies try to do this, but through the use of schedule page adjustments, have individually numbered schedule pages, or do whatever you need to do so that you can react quickly when a state turns down your filing or you need to make a slight tweak in the market. It's a lot easier if you can simply refile one page, instead of a whole contract, or bracket the information. Having some foresight early on in terms of how you create a policy form can solve a lot of problems down the road.

MR. KALMBACH: That's very good information. One thing that we do, particularly on the implementation side, is try to anticipate how many state variations we'll have. Will we have variation in rates? Will we have variations mostly with regard to rates? We have probably three, four or five states where we typically find some variations, and we will have built that into our product plan to anticipate those rate variations, so that we're at a point where we're actually implementing the product in the system. We have placeholders that can support changes in rate structures. We've learned that through experience, when we were faced with a state that had actually required the difference in rates. Maybe it was a nonforfeiture demonstration and we had to build a whole new plan for that state, and that backed us up as far as product development time frame or delayed introduction for that particular state.

As far as state filing and rate delivery, this is, for us, pretty much auto-pilot at this point. We are now looking at, more importantly, how the product is positioned within our portfolio and developing that marketing plan. We determine, for instance, if we have two variable life products and we're introducing a third, how does that third variable life product fit relative to the other two, and how do we

position that with the field? We give them instructions as far as why to sell product A or product B versus product C.

One of the things we're continuing on is state approval. When state approvals are coming in, we're responding to the objections as quickly as possible. We have a group of individuals who maintain a list of where they are in the state filing process. When one of those objections comes in, e-mails go out that continuously update us on the status of those objections, where they are in-house and when we expect to have a response back. We have found at times that without that type of process in place, sometimes we thought that someone else was working on one of those state objections, when, in fact, it was just lying dormant. We didn't realize that, say, actuarial needed to do something; we thought it was in the contract department's hands as far as solving that state objection. The communication path, as far as where various state approvals are, has also been a place where we've been able to improve the number of states that we have available at product launch.

At this point we're again looking at product positioning against the other products. We're doing a more competitive review, again looking at whether the product competitiveness is where we want it to be in the marketplace given where we are in the product development process. We've found times when the marketplace has just shifted. We thought that we were going to be in the first quartile given where the marketplace is, but the marketplace has moved and now we're in the second and third quartile. What do we do? Those are bumps in the road. It's an imperfect process. Our competitive information and intelligence is not perfect. That's actually when we do look for insight from the experts. We'll call a Tim Pfeifer or call someone at Tillinghast to get some perspective on what's going on in the marketplace. We try to do that earlier rather than later because if we find it at this point, we're looking at missing our implementation schedules.

Market launch and product training is an extensive process for us. Developing the training materials for a new product is complex, as far as making sure that we're sending the right messages and making sure the product is being positioned appropriately, depending on how complicated the sales systems are and how new the product is as far as futures go. An example of this would be products with secondary guarantees. We have a product now that we originally had introduced with a level premium guarantee. Later we introduced an enhancement to that product which had accumulation factors on the premiums. Being able to get our field force to understand the differences between that first product design and the second product design, and then how they can illustrate those differences and be able to explain those differences to the brokers, is an important piece of the marketing launch piece.

The other piece that we find would be on the transition rules. When we introduce a new product, it continues to be difficult for us to minimize the time between when we can accept an application and provide sales support for a given product to the

point of time when we have a system that's able to administer that business. During that period of time we're in a limbo. There are some products that are in-house, which were sold on the old product form. We have the new product form out in the marketplace, but we can't get it onto our administrative system yet. There's generally a two-week to a 30-day window of when we have the product out in the street before we can actually administer the business. Managing that transition is complicated. You can end up with some unhappy field representatives and some unhappy brokers, or, if you do it right, you can be very successful in introducing a new product enhancement in giving them the best price for their clients and getting the process to run very smoothly.

At this point we're also looking for some field reaction to the product that we produce. Product pricing is, again, imperfect; we're not pricing every age, sex and risk class combination. We are pricing whether we price every five years or every 10 years. There are intermediate ages where, when you start seeing some real-life examples, you realize that your competitive positioning may vary depending upon how other products are designed between intermediate ages. That is a learning experience when we're beginning to do market launch, as well as when the product is actually out in the marketplace.

We generally introduce the product first, and then our implementation comes second, generally two weeks to 30 days later. This is the point where we will have completed our financial work and will begin to continually monitor how the business is being sold. If we had taken certain product risks for the mixed business risks, we are developing score cards and monitoring exactly how the business is being sold, whether it's consistent with what we had thought or whether we need to change our training material or change our risk management or information that we're giving the senior management about how the product is being sold.

We recently participated in a Life Insurance Marketing and Research Association (LIMRA) study on the typical time frames for product development. LIMRA does a nice job on market scans. I don't know if you have used LIMRA for market scans, but if you're interested in information about competitors in the marketplace, LIMRA is a great source for doing some surveys. They did a survey on the average new product development cycle time frame in April 2004, so it's very timely. They looked at variable life implementations, term implementations and variable life and UL repricings. They looked at rate changes for variable life and UL, as well as term, what they called "repricings," and then just rate changes.

LIMRA identified six steps in their process, which is about 40 weeks for a new variable life product. These steps aren't sequential. There is some overlap among the steps, and you can save a short amount of time through that overlap. LIMRA is reporting 40 weeks, or 10 months, for implementation to take place. I think this was a survey of nine companies as the average variable life product development cycle. Does that feel consistent with what you have seen? There are probably some

companies that are a little bit shorter and some companies that are a little bit longer.

On the term side—this one seemed a little long to me—it was 35 weeks for a new term product. A rate change on the term side was about 20 weeks. That seems a little more reasonable. The challenge is, can we get these time frames shorter rather than longer? Given the complexity of some of these new products, I think we're going to have some difficulty doing so.

A potential road hazard that we have seen, at least in my practice, is lack of senior management commitment to the priorities. What I mean by that is that the priorities have changed. What we thought was the strategy for developing products nine months from now or 10 months from now somehow changes during midstream, and that has an impact on the number of products you could implement in a year.

When there are unclear and unrealistic marketing and financial objectives, just have that open discussion of what those trade-offs are. You're going to be back sitting at the table discussing what the trade-offs should be given the situation that you're in and, again, that can eat up two to three weeks of time, depending upon people's calendars and whether you're able to decide effectively in that time frame.

Market intelligence is imperfect. The competitive landscape is changing rapidly and not always do we have the most current information. This is an area in particular where I think getting some outside help can be very efficient and a good use of your financial resources to improve the speed to market. There are product designs that we have felt we didn't have the expertise to price, and that would be another opportunity when we'd go outside to look to buy the expertise, as far as risk management goes, to certain products or riders that we might be interested in offering. We have at times found that we have insufficient resources, either from the system perspective or from the pricing perspective, to be able to get through all the work required in getting a product to market, which again will extend that time out longer.

Competition, as I mentioned, continues to move. As we're going through these pricing iterations, we have had examples where the product looked great, say, in all pay situations. It looked good in a single-pay situation, but when we got to the middle-sales scenarios where people funded premiums over five years or ten years, no longer did the product charge structure or product design work. Testing in intermediate-funding scenarios has been critically important for us in keeping on track with the product design schedule.

MS. EDGERTON: I'll re-emphasize Tim's point that it is painful to see a client go through a whole product development effort, have something ready and then it not work. You want to be quick about what you're producing, but you also want to have

the checkpoints to make sure you have consensus building, which means including the field that's on the outside talking to the client. We've seen that happen occasionally, where there has been so much work, and it's good work and you've dotted all the i's and you've crossed all the t's, and you haven't gotten the field involved. It is very important to have that consensus building upfront. That keeps those last-minute surprises from happening.

MR. PFEIFER: In terms of state filings, we've seen companies in the past that have had sort of a shotgun approach to filing. They know that there are state exceptions out there, but let's take our standard filing, throw it against the wall, see how many states we'll get and then we'll kind of pick up the state exceptions later and deal with that. Generally that's a bad way to do things in today's environment. It's good to research what you know are the state exceptions and start with as close as possible to what you think the states want and demand. In the long run, you do a lot for yourself and your relationship with the states, and you'll ultimately get quicker state approval.

Quick follow-up to state filing objections is also important. The people reviewing your filings are people like all of us, and it's easy for them to forget what their objections were. To the extent that you can be timely in responding and the issues are fresh in their minds, you'll get a better response, and your life will be better overall.

We also want to mention SEC and tax compliance. Overall the SEC's relationship with the industry is pretty good, other than the sales practice debate that's going on. In terms of filings with the SEC, my sense is that most companies have a reasonable dialogue with the SEC on the important issues. Again, just like with state regulators, you want to be very timely in your response because if you wait three months to respond to something, they'll forget.

As part of the process on life insurance, you obviously want to make sure that your tax compliance is well in hand, that you're comfortable and that any interpretations you have of 7702 issues are not going to rise up and bite you. An example of a product where these are an issue today would be long-term care (LTC), accelerated death benefit riders or ancillary benefits where the tax treatment is not always black and white. Get that ironed out early and not later.

In terms of product training, it's important that people who are going to sell your product not only know how the product works, but how it can be sold. Sometimes the focus is too much on the mechanics of the product. We have these costs of insurance (COIs) and then at the 10th year they do this and that's all great, but giving them help as to the types of situations where the product can be very beneficial will hopefully improve your sales.

Lastly, every company has to determine at what point in the process they're ready to launch. Probably very few companies would launch a product with every single i dotted and t crossed as far as systems implementation. There are always a few issues out there, and you just need to be practical about deciding that you can go forward even though you can't determine conversions on substandard, or whatever the issue is. Some companies are extremely conservative on those points. They will not launch until everything is nailed down, but I think a realistic business decision has to be made on those things.

MS. EDGERTON: Now I'll speak from a reinsurer's perspective. There are several issues that can delay the product development process. I will give a little background to what reinsurers get involved with most. Our product development team of actuaries get most involved with term product development. We offer some support in terms of mortality consultation for other permanent products, but I do get involved in the full-scale term product development from ground zero. My comments might be more toward that end of the product spectrum. What we primarily address is the inadequate expertise when you're looking at, particularly, mortality. We'll go into that in more detail. When you're looking at the underwriting criteria you're collecting, when you're looking at different risk classes like preferred classes, what are the impacts of that to mortality? We have some expertise on that. Of course, we have good quality mortality assessment tools that we have to use in our own daily business that we can bring to the table during a product development process.

We also address insufficient resources. There are a lot of different products from a lot of different companies. We, of course, cannot share any specifics, but we can share whether you are in the same range of other companies. Have you seen this product before? Those kinds of things we can share, and we do have a lot of market knowledge just because of the business we're in.

We, as reinsurers, get involved in the premium rate development itself, including in the pricing iterations, looking at some of the risk analysis, playing the what-ifs and then, like I said, doing the risk analysis. I'm going to talk about rate development, where we can play a significant role if that help is needed.

In terms of premium, we have access to lots of different premium structures and risk classes. Like I said before, if speed to market is one of your biggest priorities, that you have determined your marketing goals and your strategy. Do you want to be in that top quartile? Do you want to be number 1? What are you trying to accomplish as your primary goal, and where are you willing to trade off a little bit? You talked about the stool.

Mortality consultation is probably where we would add the most value. This is where we play a lot of trade-off consultation with our clients. We talk about underwriting requirements. Maybe you want to get a better mortality number.

You're interested in lowering your mortality. We can help you determine how much getting medical evidence at this age and amount band is worth, from a mortality perspective. We can also talk about the preferred criteria. If you're thinking about changing it or introducing a new risk class, what impact on mortality does that have? Reinsurers are in a good position to help consult on those issues.

We can also talk about target market and the distribution. If you're a company that is typically marketed to blue collar, but you have an opportunity over here with the white-collar new distribution, what would be the impact to mortality? Again, we should be able to provide some support in that arena.

Underwriting exception processing is something to which we pay a lot of attention. I was talking earlier about how it seems like we have a lot more interaction currently between the product actuaries and the underwriters. We're getting on the same page. You no longer have the underwriting committee working on their issues over here and the product development actuaries over here. It seems like we're getting together and we're working closely. If you're doing these kinds of things in underwriting, then that lines up with this kind of mortality expectation. We're also going to that next level and talking about underwriting exception processing. It happens all the time. Some companies, frankly, don't have exceptions at all. They run the house by the rules and that's the only way that you can go. Other companies have well-documented exception processes in underwriting and give some flexibility to the underwriter to use some judgment. Others do it and have no documentation of it, and we uncover it in underwriting audits. We have all kinds of underwriting exception processing and different ways that underwriters view the business, and that does have an impact on mortality.

Of course we can also talk about mortality experience. Tim is going to go into that in a more detail. What we can help with is in terms of, if you did have a block that's similar to this product or even if you didn't, can you gain some knowledge of that mortality experience related to maybe what you expected to happen that can be used in determining mortality going forward? We do get involved in mortality calibration work to see if that can help us in setting mortality assumption going forward. Again, I go back to the underwriting exception processing. Sometimes the exception processing flows through in mortality experience. How well the underwriters are abiding to the guidelines sometimes comes through on the experience, and you can see that through a good mortality calibration work.

We also get involved with clients in setting up the XXX reserves and setting prospective X factors, such as what we think is going to happen in the future, particularly on a brand new term product that a client hasn't ever been involved in.

Then in terms of the other assumptions, I'd go back to that marketing intelligence that we do have some indication of what's happening in the marketplace. We can

help with setting some of these other assumptions or just be somebody that you can bounce some of the ideas off of to see if you're in the marketplace.

When we actually perform product development services for clients, we can reflect our own reinsurance rates in the model. That's an immediate reflection for our clients of current reinsurance rates, at least from ING Re, and what kind of impact that's going to have on the product. That can sometimes really help in terms of timing. You've got reinsurance pricing going on at the same time that you have your own pricing, which can help shorten the time and speed to market.

In terms of pricing iterations, of course you're looking for certain profit targets, and that's the main purpose of doing some of the pricing iterations. I talked about mortality and underwriting expense trade-offs. Maybe we don't want to get attending physician statements (APSs) anymore. That's going to save us in expenses, but it's going to increase mortality. What kind of trade-off can I expect, and is that worth pursuing for my block of business?

We can talk about premium trade-offs. If I'm willing to live with a lower return, how much can premium change because of that? Then if you have a pool of reinsurers, we can help analyze, once the reinsurance quotes have come in from other reinsurers, the impact of the other reinsurance arrangements from which you've been giving us quotes.

Reinsurance can provide a few other additional support services. We talked about prospective X-factors and doing some retrospective X-factor testing. I brought this up in terms of getting products out quickly because sometimes that whole concept of how we are going to validate X-factors in the future can stall the product. We do provide that service, and that can put some people at ease. We also are periodically reviewing our own reinsurance contracts and would get involved with the periodic review of new products that we help develop. We do provide some state filing assistance in terms of the actuarial memos or any X-factor validation work that needs to be done. Of course, we also get involved in the impact of new regulations, like 2001 CSO, and what that can do for your premium rates.

I want to share two quick stories in terms of getting the product to market quickly and why these happened or did not happen. We have a unit of actuaries that work in product development. Both stories came from the same actuary. In the first story, he said this particular company had a term product but it wasn't very successful. They had a relationship with another entity that they no longer wanted to have, and they came to us and said, "We want to get a new term product out there and we have specific goals. Can you help us?" "Yes, we can." The key to the success is that they had very clear, reasonable goals. I would say "reasonable" is the key word in this. They wanted to be in the top quartile and they knew they had an expense structure that could help them achieve that. They also eliminated a lot of the variations before the modeling work ever began. They weren't interested in

looking at five risk classes versus three risk classes in terms of the preferred. They were very focused on the number of risk classes that they wanted, initially started with one pricing cell and honed in on that. They had little experience to analyze, so that didn't slow things down. Then, and I know we've said this a couple of times, they had clear communication with all interested parties. They had systems people, underwriters and contract people in the discussions right from the get-go. That was very beneficial in the process. They also had senior management committed to the process and available for the decision-making. Then we did have a resource, a pricing actuary, that was on-site for a week dedicated to doing pricing iterations and helping them set the premiums.

From start to finish—when I say "start to finish," I mean just the pricing, the premium development through the final premium being finished, not the state filing, etc.—the actual memo was done at the end of three weeks. This was probably the fastest effort that we've had. Again, I would reiterate that it was because of the commitment and the consensus-building that this company had that made it successful in getting a product to market quickly, and they have been successful with the product.

A not-so-successful story, on the other hand, came from a company that had an unclear plan and certainly had lack of consensus. Marketing wasn't buying into what the product actuaries wanted and they weren't on the board with the underwriters. There were multiple scenarios pursued and lots of back and forth. There were long delays for management review and approval. It didn't appear to be a top priority for them. Like I said, there was a lack of communication with interested parties. Our pricing actuary would get involved down one route and be told by another person that they were not interested in that, so they ended up having lots of iterations. It just took a long time. In that case it was nine months, and at the finish, because of the market dynamics changing, it wasn't a product that was very attractive.

MR. PFEIFER: I'm going to speak about a few other areas that may be considered to help speed product development. Obviously quicker product development doesn't necessarily mean better product development. I view product development like building a house. If the house isn't resting on a solid foundation, it's eventually going to be crumbling. One of those elements of the foundation is the area of experience studies. It would be very wise for companies to develop experience studies on a regular basis and to even have individuals dedicated to the construction of experience studies. Although we see some companies that might do certain elements of their experience on a regular basis, there are other important elements of their experience that they look at when they can, when time allows, etc. Mortality, obviously, is a major one these days for most life products. For a lot of reasons, doing an annual mortality study is desirable for purposes of adjusting X-factors, if necessary. The study is also beneficial for the illustration actuary to deliver an opinion that's based on something reasonable, and also, especially in the

case of new products, to be able to decide whether you want to adjust your underwriting criteria. To the extent that you don't have experience that's credible, obviously that makes life a little more difficult when it comes to assumption setting. Reinsurers can certainly provide a lot of input there. People like us can tell you what we've seen in the industry, but as we get into finer and finer risk classification, the ability to have some basis to predict super-preferred and ultra-preferred mortality is becoming more and more important. I hear companies say sometimes that they don't have credible experience, and that may be a valid point. In many cases I'd rather do the study, decide whether or not I want to believe the experience and get in the habit of looking at the data on a regular basis.

A product line like single-premium immediate annuities, where it's going to take a long time for mortality experience to really play out, is a lot tougher nut to crack than traditional life insurance. That shouldn't preclude us from doing that type of analysis.

The persistency side should include both premium persistency and policy persistency in the case of universal life products. Persistency studies should inherently be a little easier to do. Doing those annually should be doable, at least in some crude fashion. Ideally, even doing them semi-annually will give you some advance peek as to what's happening with your business.

On the UL side, and Tom has alluded to secondary guarantees a number of times, one of the issues that has started to come up is to look at our traditional UL business. How much of those terminations that are occurring are cash surrenders versus no-lapse values? Would that be somehow predictive to what we might see as to the ultimate lapse rates on secondary guarantee products, which tend not to have much of a cash-value orientation? Some companies are pricing those products with fairly high lapse rates and if you've done the exercise, you see that it makes a huge difference in the result. Having an ample and well thought-out persistency study on your existing business could be helpful in that regard.

Expenses are an area that is clearly an art and not a science. We see a lot of different approaches to expense allocations. Some companies give certain product lines a break as far as expense allocations, and others are asked to shoulder more. Doing annual expense studies, if possible, would be very helpful. We realize that this is one that takes a lot more time, so doing it every other year ends up being more practical for some companies.

One that often doesn't get fully focused on is the business mix. We see companies who very often price with some level of subsidizing between cells. If the 45-year-old loses money and the 55-year-old makes a lot of money on some aggregate assumption, the product is fine. What ends up happening once the product is issued? Are we actually getting that level of subsidy that we think we will get? Granted, this is a monitoring of something after issue, but I think it ends up feeding

into new product development in a useful way that can help make those decisions easier when you're developing something new. We've seen a few companies where the experience study actuaries are actually part of the pricing team. They are intricately involved in the product design process and can shed a lot of good insight into what is out of bounds in terms of what can be expected. In terms of the business mix, we think generally that if you're selling similar products through similar distribution outlets, your anticipated mix of business is probably going to be similar to what you've had in the past, so it can be fairly predictive as to what might happen.

Another area on the product side that is getting more and more focus is the investment side. We do see companies bringing in the investment personnel a lot earlier in the process, especially for certain types of products. Annuities, cash-value oriented UL and even the no-lapse guarantee products are starting to find that the investment assumption is quite important. Bringing the investment people in late in the game is typically not a wise thing to do. The selection of assets, though you might have historically tended to invest a certain way, may not be possible or prudent or advisable for a new product. Getting the investment input as to quality, duration, and all those issues upfront with some fairly difficult and honest discussions about what is really achievable in the market is important. In the process of setting rates, we hear often that the investment side is sandbagging our rates, they can really get 15 basis points more than they're telling us, and all those things. Those need to be upfront discussions that weigh into the product as well.

Let's talk about reinvestment philosophies. On some products we're seeing companies assuming reinvestment at rates above where they are currently, under the theory that we're in a low-rate environment. That is a big item for immediate annuities, for example, and certain other products. Philosophically you need to have a view on that.

Most companies are passively managing their investments, but some are actively managing. How does that weigh into the pricing? Do you assume that you're going to take gains where you can take them, and how much value are you getting for that?

As far as stochastic modeling, I would say the majority of companies today, even for annuity products, tend to price deterministically to get the level set for the product, to begin filing and things like that. They are bringing in the stochasticism down the road to fine-tune the necessary spread and things like that. That's going to need to change over time as the products get more and more complex and have more behavioral components to them. In those cases, the stochasticism needs to come in earlier in the game.

Just as an experience study actuary is useful to have on the team, an investment actuary who's forming a bridge between the product people and the investment

department, if you have a structure that allows for that, can be an extremely important person.

I will make a few comments about annuities. Much of our discussion so far may be tilted more toward the life insurance side. I want to say a few things about annuities and how you can bring annuities to market quicker. Probably more so than the life insurance area, annuities do allow for more modular product contract development. Most of the standard language in the annuity contract is pretty typical across all the contract types. Where they differ is how they credit interest, perhaps death benefits and things like that. We certainly see companies that use one chassis for many, many annuity products; it's easy altering schedule pages or bracketing, allowing them to turn on a dime and introduce new products fairly quickly.

The use of riders for certain types of benefits may be helpful. I'm thinking here of the living benefits on the variable side. Other enhanced death benefit features can sometimes more effectively be set up as riders rather than part of the base contract to the extent the states don't like the benefit or the feature. It's a little easier to deal with them on a one-off basis and, in a rider discussion, go ahead, launch the product and deal with the rider issues later on.

We talked about stochastic models. Annuities can be managed on a micro or a macro basis. By that I mean there are companies out there who view all of their annuity money as essentially a pile of money, some of which came in eight years ago and some of which came in yesterday, and the idea is that managing it on a lump basis, or a macro basis, may afford you certain advantages or disadvantages, depending on the rate environment. If you are a company in today's environment where rates have generally been low and you've had a lot of in-force business, it probably puts you at a competitive advantage versus new entrants. It gives you some more flexibility in creating competitive products. If rates tend to skyrocket, companies with lots of in-force fixed annuities are going to be in a much tougher situation. One element of getting products to market quicker is deciding whether or not you want to manage on a micro or a macro basis.

Equity-indexed annuities (EIAs) are quite a hot product right now. We're seeing a lot of activity on EIAs. That's a product type that is a little more difficult than a standard fixed annuity to get to market quickly, especially if you have not done EIAs in the past. The reason is primarily getting familiar with the issue of hedging and buying call options to support the guarantees. There is the issue perhaps of training material, setting up a proper training regimen for your producers. Even with that, annuities of an EIA nature are being introduced in six to eight months by some companies, which is fairly quick. If you are selling an EIA that has a market value adjustment (an MVA) or something else that would make the product a security, that time line would be longer—similar more to a variable product.

There's a lot of information available on the competitive side in the annuity world. On the variable annuity (VA) side, certainly VARDS provides lots of information about annuity products and sales. The Fisher Index on the fixed side provides some good basic information on where products are going. Lots of annuity Web sites can tell you what is going on in the marketplace. EIAs are tracked by Jack Marrion's firm, and there's a lot of good information there. Beacon is another firm that has begun tracking fixed annuity sales and fixed annuity products. Those options help you along in the process of knowing what the market is doing.

Pricing an annuity in most cases, aside from the ancillary benefits, comes down to figuring out what your spread needs to be. Whether it's an EIA or regular fixed annuity or a VA for that matter, it comes down to what spread you need. What that serves to do is highlight the importance of stochastic modeling, but it also allows you to maybe get ahead of the pricing a little bit by getting some of the systems things going, some of the filings things going and then spending your time focusing on backing into what that spread needs to be.

Certain states have clearly identifiable filing issues. Those of you in the annuity world know who they are. Washington has the prospective test. Maryland has a problem with that, too. Connecticut has this and that. The filing issues on the annuity side do tend to be fairly predictable. Occasionally somebody will come up and blind-side you, but if you have experienced annuity-filing people, generally you can anticipate where the problems will be.

I struggled with how to present the roles of the consultant without making it a commercial, so I tried to put myself into the shoes of somebody who would be hiring a consultant. What would I be looking for? On occasion, consultants can be helpful for baseline pricing. If my resources are tight, if I have a new product that I'm not that familiar with or don't know how exactly to look at things, looking at some outside assistance would be helpful. It certainly helps if the system the consultant is using is consistent with the system I'm using, although that's not essential. Consultants can help obtain competitive information. We have a quarterly dialogue with about 10 companies that are done individually, not in a group, where we just talk about trends in the industry. Some companies want to do it on annuities, some on life and some on both. We just talk about what's going on. The purpose that it serves for these clients is for them to say that they knew that or that it's new and they didn't know that. The idea is to give them a picture of where we think the market is, and sometimes it spurs ideas. Sometimes it's just a validation-type exercise, but that's a role that I think consultants can play because we do see a lot of things.

We also know what's in the pipeline. In the practice that I have, which is primarily product development, the discussion earlier about competition being a moving target is certainly true. While we can't necessarily tell our clients that XYZ Company is going to introduce a UL product with a premium of this, we can say things like

"Start paying attention to accelerated death benefits or no-lapse guarantees funded on a single-pay basis" because we see that being focused on. It is helpful to zig and not zag when the market is moving in that direction.

We can provide insight based on prior experience. That's probably one thing that we've felt good about in a lot of our client work. We've saved a lot of clients time by not pursuing things that everyone seems to have run into a similar problem with, whether it be systems, compliance or whatever. At times, consultants can save you months of effort. Sometimes it is because we've made the mistakes already. We've backed into the spikes in the tree, we know where to look for them and we can help you avoid making those same mistakes.

For regulatory filing discussions, an independent party can often get a better hearing from regulators based both on our experience and on our being viewed as an objective third party. Generating reserve factors and things like that are certainly core to what we can do. We can help if you're looking to get into a new line of business where you don't have in-house expertise. Equity-indexed products would be a fine example of that right now; we see a lot of companies moving in that direction. Variable annuity guaranteed benefits would be another one where you can start at second base rather than at home plate.

One of the things that you want to demand of your consultants is that they document what they do well enough that when they leave you can pick it up and become familiar pretty quickly with what they've done. I'd like to think that we always do a great job of that, but we don't. We get calls from people that say that we worked on this two years ago, they looked at the documentation and they couldn't follow it. We need to strive for better documentation; documentation makes a big difference.

Using consultants can free up people on your existing staff to do other things. I think that's important. As you prioritize what you need your key people on, you can free up their time by using outside help. Often we're asked to sort of deliver a verdict. Do we think the answer is A or B? Sometimes we know we're being put into that position, and sometimes we don't know we're being put into that position, but often our role is to either confirm something you're thinking or question it, or opine on something on which there's an internal disagreement.

I've been doing this for a fair amount of time, and I've seen companies that use consultants very well. I've seen companies that don't use consultants very well. I would be the first to say that you don't always want to use consultants in certain situations. If you don't have a clear internal consensus about the value they can provide, that can be a rocky road, and it can lead to disenchantment from some faction within the company. You want to have general agreement that bringing in outside help is a good thing to do.

If you're at all in doubt about the expertise that your consultants are bringing, you want to retrench. We've seen situations where consultants have been brought in and they were the wrong people. Having them mess something up puts you back further than you can ever possibly recover. Be confident in the expertise of the people you're bringing in.

We've been involved in situations where the motives were political. Someone was trying to bring in a consultant that this person felt could say the right thing in order to move himself or herself up the ladder. That's usually easy to figure out once you get the lay of the land, but it makes consultants uncomfortable and therefore not as effective.

You also look at situations where a consultant might be put in a box professionally. We've been in situations where we've been asked to not be creative. Basically, we have been told to answer this set of finite questions or to choose this solution versus that solution. We would offer a third solution. We were told they don't care about that solution. To effectively use consultants, you want to give them the freedom to give their opinions. You can certainly choose to ignore their opinions, but allow them to reflect on their experience.

MR. NOYES: In your opinions, what's the most important item you've seen in your experience of all micro processes in the particular situations you get, where I would say there are three different views of the process—the direct writer, reinsurer and consultant? What do you see as the biggest thing involved in the process?

MS. EDGERTON: I already mentioned having the consensus-building right from the get-go. I like the comment that just because it's fast doesn't mean it's good. Sometimes it's okay to take a little time and do a better job than having speed-to-market be your first priority. We have seen the unnecessary delays when everyone wasn't at the table from the get-go getting consensus about the goals.

MR. KALMBACH: I'd agree with that. Having realistic expectations, both marketing objectives and financial objectives, and understanding those trade-offs, in which direction you'll move, are probably critical for being able to meet expectations on the time line as well as the end-product success.

MR. PFEIFER: Maybe another way of saying that is ultimately a lot of this comes down to communication. What are the goals? What are the expectations of the product? Probably the biggest single thing that I see fouling up the process is communication or lack thereof. The wrong people were involved in the meeting. So-and-so didn't know about this. We didn't realize that we weren't going to be in the second quartile; we thought the first quartile. Those things ultimately come down to where I think you want to over-communicate a lot of this.

FROM THE FLOOR: When you bring people to the table early though, is there a

risk that you get these people to the table early, they're involved in the process from the get-go, but then as the product develops and things change, they may still have the assumptions of what were made early on in the process? How do you manage that continual communication and keeping people up to date throughout the whole process?

MR. KALMBACH: In my presentation I purposely put checkpoints one, two and three there along the process because we have found that we must go back and reset those expectations to remind them what we had agreed to before, to tell them where we are now and to get clear direction from that point forward. I think that is a good way to manage the process. Continue to get those same people back in the room again and get them involved with where you are in the process.

MS. EDGERTON: I would say that the first example I used explains why they were so successful. They had those regular meetings throughout those three weeks with all interested parties, including contract people that are little later down the line and the systems people. That's what got them to market pretty quickly. I agree that over-communication is what made it successful. Everybody knew what to expect. Everybody knew there were changes along the way. They were so committed to getting a product out there that they were willing to give a little along the way.

MR. PFEIFER: We worked with a company once that followed this idea. They used a product specifications document (I'm sure in your companies you have names for these). It was viewed that nothing was official until it made it to the next version of this product specification document. If you sat at a meeting and three of you agreed that something ought to be done in a certain way, it had to be in this book or no one was accountable for the fact that it wasn't done. When people have been involved in the process and then things change, the idea here was that every time you issued a new version of this book, you had to indicate the rationale for why it was changed, and hopefully there were good reasons for it. I think that will help people stay abreast of why things are moving on them and hopefully make them feel part of the process.