

RECORD, Volume 30, No. 3*

Annual Meeting and Exhibit
New York, NY
October 24–27, 2004

Session 19TS

Bringing a Health Care Product to Market—A Case Study

Track: Health

Moderator: DAWN E. HELWIG

Panelists: BRAD S. LINDER
KARL G. VOLKMAR

Summary: This session details the actual product development process for a hypothetical health care product. This simulation includes the many stages of the product development process, including concept and design, development and market introduction.

MS. DAWN E. HELWIG: The first speaker is Brad Linder. He is assistant vice president with Gen Re LifeHealth. Prior to Gen Re, he worked with TIAA CREF. We also have Karl Volkmar from United Health and Actuarial Services. He has been the owner and the principal of the firm for five years, where he does individual health and group medical and a wide range of different types of projects. Prior to being a consultant, Karl held a variety of actuarial and non-actuarial positions.

We're going to be doing a little role-playing, as we're going to be simulating the process that a company would go through in bringing a health care product to market. We're going to start out with a marketing meeting as the idea is brought to the company, then move from there into an administrative meeting as the specifics of the product and how it would work are discussed, and from there into an actuarial meeting, which is where all of you are going to come in as part of the actuarial department. We'll wrap up with what kind of follow-up would need to be done later.

We would like you to participate. This is not a panel discussion. It's not the kind of thing where we're going to leave time at the end. So, feel free to participate as you go.

As we start out with our marketing meeting, we all play characters. We're going to change our names here for this discussion. I'm the president of the company. My name is Madame Hellbent. I will also play the role of the administration person. Brad is our marketing person, Brad Marketeer. Karl is our actuary, Karl Kellison. We'll start out with a bit of role-playing and then move into more official presentations.

As president of the company, I thank you all for coming. As you know, normally when somebody has a new product idea within a company, there's a variety of different ways that it can be brought to bear. Sometimes we're just directly copying somebody else's product. I know we all like to say that never happens, but we all know that it does. There are other times when perhaps a company has reviewed its portfolio and decided that some changes need to be made or that there need to be some enhancements of current products, and a brainstorming session is called.

We actually have a very creative marketer here in Brad Marketeer, who has come up with an innovative idea that I think our company should really be looking into. I think you've called this the HICUP product, if I recall. We would like you to give us a presentation of what you're thinking with this product and how it would fit in to what our company's doing.

MR. BRAD S. LINDER: Thank you, Madame President. I'd like to present to you and our audience of key interested employees the plans for developing an exciting new product and bringing it to the marketplace. This is not a goofy idea. First of all, I'd like to describe the product to you. Perhaps the best way would be to use an analogy. It's similar to a universal life (UL) type of product, but instead of solely life insurance, our proposed product includes health insurances on that universal chassis. Consider the possibility of a health insurance, cafeteria, universal policy (HICUP).

We've currently designed our HICUP product to include three types of benefits. Benefit A provides for a number of general health insurance categories. Currently, the health insurance categories are critical illness, dental, long-term care, medical and prescription drugs. There are some important deductibles that will help keep the premium cost affordable for each of the insurances under those Category A benefits. For long-term care, there is an elimination period of 90 service days. For all others, there is a \$1,000 deductible per year indexed by the medical Consumer Price Index (CPI). The insured coinsurance for all Benefit A coverages is 20 percent.

Under Benefit B, we'll have the possibility of a critical illness lump sum benefit on the named insured's first occurrence of one of a specific list of diseases/conditions. Under Benefit C, we'll have a life insurance possibility. As you may know, the

current menu of benefits is a subset of the insurances that are hotly desired and debated in the national marketplace. However, it appears that they're only offered separately. No one has thought to package them together in any meaningful way. Discussion of a national health insurance or some system of unified health products started under Mr. Clinton's first term as president. Mrs. Clinton's committee really opened up that national public debate and awareness of the health insurance issues. Unfortunately, political posturing has since scuttled meaningful reforms.

This menu of benefits happens to be one that our company maintains a substantial current knowledge or expertise in, and that's important. Stated another way, we're not suggesting that our company offer any benefit that we don't have substantial knowledge of. This includes internal expertise, as well as expertise offered by a partner, such as the reinsurer. Under this design, it would be possible for us to develop enhancements to the basic chassis. You can probably think of some interesting inclusions right now. You may expect that enhancements would be recommended when we have determined that there is a market need, and when we have demonstrated substantial knowledge in the area of that enhancement.

Let's move on to some of the particular design features. We have both individual and group as a possibility. Benefits are supposed to coordinate with all other health insurance plans. That will be helpful for maintaining a low premium cost. We'd like to have it offered in both the employee and the employer marketplace. A group version of this product should be fully portable, and that will help in the employer marketplace. I'd like to ask at this point if any of our key employees or you, Madame President, have any questions.

MS. HELWIG: Well, it's sounding pretty exciting to me already. I hope we're going to be able to sell a lot of it, because we really need our stock prices to go up. I have stock options coming up soon, and we need to get them going.

MR. LINDER: I do, too, Madame President, and I'm very, very aware of how much we need to sell in order to make us look really, really good.

MS. HELWIG: Good. Okay, go ahead.

MR. LINDER: One of the key things that I want to alert you to is that I have some projections for sales at the very end of the presentation.

We want to have all of the coverages that are offered fully underwritten for the coverages that they're selecting, including for increases. This is not anything unusual.

The next feature is participating policies. This is an interesting design that would allow for crediting back of experience to that block under each of the coverages that are offered. The unfortunate thing (and, Madame President, I think you're really going to have some concerns here), is that we're going to have a conflict

between our policyholders, as well as the stockholders. So, we have to really clarify that before we proceed with the product.

We're not going to be offering joint life coverages. Each particular contract is going to be associated with only one insured life, but you can have other members of the family get it.

MR. JIM TOOLE: I'm with the southern marketing division. Typically I just want to sell. And when have I ever needed prior expertise in a product? I just want to get benefits on that product and get it out the door right away. I don't care if you know anything about it.

MR. LINDER: Well, we're going to be developing that marketing message to help you sell. One of the issues that we have to also deal with is the commission structure to give you an appropriate incentive for selling. We realize that some individuals in the marketing profession are hell-bent on selling those products, and that's what we like to see. So, we'll give you enough ammunition at the appropriate time.

I should give you background on marketing considerations. Traditionally, we start the marketing process by examining the needs of our core customers. What do they need and why? Consistent with our company philosophy and mission statement, we seek ways to provide additional value to our customers. The HICUP is a product where we feel that our customers can purchase health insurance coverages that are tailored to their needs on a one-stop-shopping basis. This should help in that marketing message.

Our HICUP allows the customers to moderately adjust the levels of their coverage as they progress through their busy life cycles. Let's look at the customer's external environmental factors. First, we're evaluating the competitive environment. The HICUP will allow us initially to be monopolistic. Are there any product substitutes? Not easily. Product substitutes will be considered the separate insurances themselves, but the flexibility in changing or modifying them to keep up with the customer's life cycle will be unique to this HICUP product. The marketing department is researching if there's at least one competitor offering all of these separate insurance benefits. Keep in mind that we have to do it better in the customer's perspective. We'll need to keep asking our customers and ourselves: Is our total value better than the sum of any of the available parts?

We offer one-stop shopping of these coordinated coverages. Can we achieve this perception advantage that's going to be necessary for us? We've identified strong brand loyalty by our customers based upon studies of our historical sales results. Are there economies of scale possible? Yes, there appear to be a relatively high number of sales necessary in order to reach optimum level. Therefore, there are significant barriers to entry for our competitors. Are there regulatory issues? Yes, there could be significant barriers for approvals or significant delay of approval in

some states. For example, some states have had significant struggles accepting the critical illness products for a number of reasons. We expect that our new way of offering these health insurances might cause some initial concern by regulators. However, we do not believe that there would be any permanent barriers.

Evaluating our economic environment, it appears that we're currently on an upswing of the business cycle out of an apparently modest recessionary period. Current economic indicators tend toward an overall general improvement in the national economy, and while unemployment figures are of particular concern for us, these are expected to decline. Of course, the inflation rate is low. There's an expectation that the Federal Reserve will increase interest rates as the national economy picks up speed. An economic expansion will be important for this product.

Evaluating the technological environment, we expect that the computer resources necessary for HICUP exist in the marketplace. There are actuarial systems in the marketplace that can handle the universal chassis, which is good. Additionally, we're confident that the additional requirements necessary, if and when the company decides to offer a variable universal chassis (we'll affectionately call that the HICVP for now), will be able to be offered.

Computer memory seems to be getting cheaper per byte. Computer processing speeds keep getting faster. Both improvements are excellent and necessary to run this product effectively.

There is a typical concern that sometimes gets overlooked from the get-go: Can the product and all of its requirements be programmed? Do we have the talent available to program all that's needed? We must decide if the necessary talent is internal or to be outsourced. It's going to be a heavy decision there.

We looked at the social environment in detail. The quick list of examined demographic characteristics includes age, sex, marital status, household composition, income, life cycle stage, race, nationality, education and occupation. We've also looked at the trends of the aging population that we're facing in the United States. We expect to consider the results of focus groups and telephone interviews in developing a formal marketing plan. Based upon our initial research from our existing data, we've identified target segments of the population to which certain HICUP benefits will be desirable.

Let's look at the company's internal environmental factors. This product happens to be consistent with the products that we're offering currently in our company—the group versus individual, life versus health products. We're focusing on the same core target markets, so, there are not going to be any changes there. We are the experts in that market.

For the distribution systems, we're going to start with the captive national career agency as our first marketing thrust. That is 99 percent of where our thrust is going

to go, because that's what we have. If we need access to other systems, then we're going to go to the agency systems and possibly to the direct marketing systems, but our first and foremost thrust is to use our agency systems, and they'll be happy about that.

We're a stock company, and we can raise some capital into the future if we need it. We do have a problem of satisfying our stockholders and Madame President's return. We have the problem that I identified earlier about deciding what to do in the participating nature of this product design. Dividends must define who gets what first, i.e., the rules.

We're a medium-sized company. We have an A rating, which is good, and we are able to get some seed surplus from other lines to start this product. Our culture is maternalistic, as you might have guessed, and we're not afraid to experiment in new areas in order to improve the products and services that we offer.

Based upon our valuable initial feedback from our talented actuaries, agents and underwriters, we've developed a baseline for sales over the next few years. First-year sales are 10,000 policies; second-year sales are 25,000 policies; third-year sales are 100,000 policies; and fourth-year sales are 250,000 policies. To come up with these numbers, we started with focus groups, sales history on our existing products and limited telephone surveys. We talked separately to existing customers, as well as non-customers. We talked to our agency force. We anticipated a marketing strategy that would use our captive agents and use brokers as a possible second sales thrust. Of course, I believe there is a material dependency on the commission structure and the bottom-line sales. I understand that we won't know the numbers until our actuaries tell us what we can do. We can evaluate our agency contracts after we know the numbers and send a recommendation through legal. This start-off on sales anticipates a conservative bit of nervousness by a national target audience in understanding the product. As it becomes better understood, we expect sales to improve. This doesn't reflect sales by the underlying coverage selected.

MS. HELWIG: I can see that the sales estimates don't reflect, as you said, the true underlying sales. Do you have any information about that or any expectation at all?

MR. LINDER: You are correct. The projections are only in terms of policies sold. Right now we're going to anticipate that sales splits will be proportionate to the separate coverages currently sold by our company. Our customer loyalty work gives us an initial split of how well our cross-selling of internal product coverages will probably work. We do anticipate significant increases in the number of multiple coverages underwritten, though. While we anticipate a possible drop in the sales for our company's separate coverages that are offered right now, we expect that we'll make up any decrease in numbers, because it's a major improvement from the way our individual coverages are offered. This is a much better vehicle.

FROM THE FLOOR: Right now our claims and underwriting are functionally separate between life and health. How do we plan to address that?

MS. HELWIG: Well, I think we're going to have to call an administration meeting and let them figure out how to do it. I have great confidence that they'll figure out some way.

MR. KARL G. VOLKMAR: First of all, many of the key interested employees that are in the audience are going to be the actuarial department here in a very short period of time when we have our meeting. I know there'll probably be similar questions from the audience as well, but I thought I would ask a few to try to get my arms around what I need to do. Given that you have this product with all these coverages, and it's all packaged together, what type of underwriting do you anticipate is going to be done? I've never met a sales guy who didn't have an expectation for what underwriting was going to be like.

MR. LINDER: Very little is the normal answer. We do point out the expectation is that it will be fully underwritten. The underwriting department will need to determine for each of those coverages what that will mean, and that is an appropriate acceptance of the risk.

MS. HELWIG: And, Mr. Kellison, I would expect you to work closely with the underwriting department to make sure that you incorporate whatever they're going to do into your pricing. We have to get this right.

MR. LINDER: And I would need to, as a marketer, understand what you're doing, too, because I have to formulate a message in order to put it into my brochures, as well as instruct my agency force.

MR. VOLKMAR: I think there really are two issues. There's the underwriting that happens at issue, and there's the underwriting that goes on as the changes and coverages evolve over time.

Again, I've never met a sales guy who didn't have an idea with respect to where rates were going to land. Given that you have all these separate coverages out there that you're already selling and given rate levels, how are you hoping that the rates for this will land? You made the statement in your presentation about the whole being better than the sum of the parts.

MR. LINDER: Yes.

MR. VOLKMAR: So, how would you expect the rates to land?

MR. LINDER: We anticipate it's a nice, low premium price to entice the individuals to buy the product where the individual coverages are going to appear, but we also have to protect the company and return a healthy dividend to our president and

stockholders. So, realizing this is a participating policy, it probably will be on the higher side in order to give us the leeway to credit appropriate dividends back as a strategy.

MR. VOLKMAR: Okay. How about on the commission side? Again, all these different coverages that we're mixing and matching have very different commission structures, levels and everything else.

MR. LINDER: Exactly. There is a theory about the commission structure being that the more levelized the commission structure is, the more there's a relationship between the agency force and the owner of the contract. That is a good thing for customer service elements, as well as the relationship with that client. Since we really strive to improve those relationships, that's not so bad, if you wanted to go to a more levelized structure.

MS. HELWIG: I would like to say I don't think we should be paying more than 10 percent commission on this. —

MR. VOLKMAR: I wish everything a sales guy said were written down. Wouldn't that be an interesting dynamic? On page 3 of your deposition, you talk about your opinion with respect to the regulatory issues that you foresee. Where did you get that? I mean, what are you basing that opinion on?

MR. LINDER: We noted that there was great difficulty, particularly on the critical illness side. A lot of the insurance departments were not used to that product in this country, and it was tough trying to get that product approved. So, there's experience there. We've had a lot of regulatory control, issues and understanding on the long-term-care side. Those two areas alone cause us some concern when we join just two types of products. This is unique in the marketplace, and there's no specific authority, which some legislators look to, in granting approval. This is something that will have to go to the insurance departments. We need to have a wonderful conversation and convince them that this is a good product to offer out into the marketplace and gain their approval. We anticipate that it's going to be tough for them to allow us to do that product in those states.

MR. VOLKMAR: Okay, I have just a couple more. How do you anticipate this is going to be rolled out? You're going to have this product where everything is bundled together and it's going to go out there, and we already have products out there that have the individual coverages. What's going to happen to the existing coverages that are out there?

MR. LINDER: The existing coverages hopefully will go by the wayside.

MS. HELWIG: Well, I don't know. I don't want sales on any of our other products to drop here.

MR. LINDER: Well, that could happen, because this might be a better vehicle for them.

MS. HELWIG: Then we'll really have to sell a lot more of this.

MR. LINDER: Right, to make up that difference. That's what's anticipated as a marketing goal, that the sales that we have individually right now will be replaced or bettered by the universal product.

MS. HELWIG: Okay.

MR. VOLKMAR: Do you anticipate a test rollout process, or are you just going to, for example, pick a state or two to release this and see how it goes? Are you planning to go just as approvals come in?

MR. LINDER: As approvals come in, new and improved product, here you have it, that will allow us to better time going to the marketplace with those advertising materials that we have to have approved in advance. Then it will allow us to go state by state for training with our agency force as well.

MR. VOLKMAR: Okay. Have you considered in any way just merging or somehow packaging together the products that are already out there?

MR. LINDER: It's going to be a little more difficult to do that, and it won't be as nicely tailored to the individuals' needs and their life cycles. When you have a product right now, it's very difficult to ratchet back levels of coverage that a consumer may not need right now in his lifestyle. For example, in the long-term-care product, they have to buy a level that is immediately out there, and if they don't have the contractual ability to roll back coverage, then they have to go to the company and ask, "Please can you roll back my coverage?" This universal product will allow them to do that as a contractual right. It's better for them in that fashion. It's easier for them, and they can do it as their lives change.

FROM THE FLOOR: How are you going to comply with Section 7702?

MR. LINDER: We're going to ask our legal department specifically about that.

MS. HELWIG: Thank you very much, Karl. I always rely on you to ask the good questions here, but I think we're going to have to postpone a lot of these issues until the administration people sit down and talk and the actuaries sit down and talk.

Thank you very much, Mr. Marketeer. I am so excited about this product. I think there's a lot of potential here. You kind of blew me away with this presentation. I'm used to our good friends from the southern division just throwing an idea out there

and expecting us to flesh it all out for them, but you've really done a lot of the backup thinking about it.

MR. LINDER: I think that this product has a great deal of value, particularly when it hits our stockholders.

MS. HELWIG: I would like you to get together with the administration people, send them something in advance, present something to them, and then let them get the details worked out. Karl, I assume you'll get together with the actuarial folks and get all the pricing done, and we can have it on the street in, what, a couple of months?

MR. VOLKMAR: Probably. We'll have to define those time lines for you.

MS. HELWIG: Great! If there's any delay beyond a couple of months, please let me know.

MR. LINDER: It may be important, Madame President, to define a product manager or a product champion.

MS. HELWIG: Well, that should be you, shouldn't it?

MR. LINDER: If you'd like.

MS. HELWIG: Yes.

MR. LINDER: You want an individual who really stands behind the product and really believes in it.

MS. HELWIG: I think you're the guy.

MR. LINDER: As a summary, the marketing officer shouldn't be asserting the viability of the product without talking to the customers, the actuary and the other administrative officers that are in the company. If there's no appetite for the product, you won't sell enough of it to justify the expense. If the actuary cannot determine the correct premium, the perfect premium, for the respective benefits promised, then financial plans are going to get ruined, sometimes very quickly. If administrative units cannot deliver or are surprised by the promises involved in the product, the company will fail and tarnish your reputation. Stay within your areas of expertise. If you want to venture into a new area, bring along as many of your experts and expertise as possible. Whatever you are doing, choose to do it excellently today. And last, but not least, marketing presentations need to be brief.

MS. HELWIG: Okay. We're going to move into the administration meeting, and I'm going to change personalities to be the administration person. I'd like to do a roll call here for our administration meeting. Systems, are you here today?

FROM THE FLOOR: Here.

MS. HELWIG: Customer service?

FROM THE FLOOR: Here.

MS. HELWIG: Okay. Legal?

FROM THE FLOOR: Here.

MS. HELWIG: Thank you. Underwriting?

FROM THE FLOOR: Here.

MS. HELWIG: Actuarial department?

FROM THE FLOOR: Here.

MS. HELWIG: Sales?

FROM THE FLOOR: Here.

MS. HELWIG: The marketing department?

FROM THE FLOOR: Rarin' to go.

MS. HELWIG: Great! Let's get started with some of the major issues here. I'm sure you've all read the product summary that Brad Marketeer sent out to you, so you know some of the specifics. But before we jump into the details, are there any general questions about the product?

FROM THE FLOOR: Yes, Madame President. As the senior representative of the information technology department, I have one question. Are you serious about this product?

MS. HELWIG: Well, yes. We take all of our product development process very seriously. Do you have any concerns about your ability to establish eligibility, to categorize claim filings, to adjudicate the claim, to track the fund balances, to roll out a new pricing system, to field the underwriting program or to report key metrics?

FROM THE FLOOR: Yes.

MS. HELWIG: Okay. Moving on, I'd like to cover some key design elements and make sure that everyone has considered the implications to staffing and budgets for next year. Legal, your responsibilities include assessing the current regulatory

environment, to find out whether any state might prohibit this product, as well as to prepare the form filings that are deemed to be acceptable. Can you provide an overview of what your approach is going to be?

FROM THE FLOOR: Yes. We know, especially with respect to state laws that might apply to this product, this is beyond our internal capability. So, we've engaged the services of a consulting firm well known for their expertise in this area. All form filings will be handled internally.

MS. HELWIG: Very good. Any concerns about what's going to happen?

FROM THE FLOOR: No, no, we have a can-do attitude, and we will be ready come heck or high water.

MS. HELWIG: Very good. And I do hope you're going to do everything by the book.

FROM THE FLOOR: Absolutely.

MS. HELWIG: Okay.

FROM THE FLOOR: Their form filings are stored in Microsoft Word 1.01, and we are planning an upgrade next month. So, their progress might be impeded.

MS. HELWIG: Let's move on. Underwriting, can you summarize what your approach is going to be?

FROM THE FLOOR: I'm a bit concerned about this product. It's unlike anything we've ever seen before, and I think we may need a separate area to handle the task.

MS. HELWIG: Do you view this as more of a morbidity or a mortality risk?

FROM THE FLOOR: Definitely morbidity. I'm inclined to search for underwriting candidates from the health side, but I'm not sure if I should start with medical or long-term-care underwriters. Most of the claims are likely to be for medical, but the long-term-care adverse selection risk scares me a bit.

MS. HELWIG: That's a good point. What if you were to search for underwriters that have done both? Maybe HR could help us. I'll follow up with them later to see if they can screen some employment records and find some good candidates. Any other underwriting concerns?

FROM THE FLOOR: No. This will be a challenge, especially since we're the industry innovator. I'm more comfortable as a follower, but I think we can make this happen.

MS. HELWIG: Good. I like that can-do attitude. Let's move on to sales. Sales, what kinds of issues do you see?

FROM THE FLOOR: I think this is a great product. I can sell a couple of million in premiums in my spare time on the golf course, but I'm thinking more like a 35 percent commission.

MS. HELWIG: Well, as our president said, we're going to be paying 10 percent commission with 2 percent residual. So, we'll have to talk about that later. I'll move on to the actuarial department. Where is my actuary, my crown jewel and omniscient prognosticator?

FROM THE FLOOR: Here, ma'am.

MS. HELWIG: Great! Have you figured this thing out?

FROM THE FLOOR: Well, not really, but it's only 6 p.m., and since my day is only half over, I'll see what I can do by the close of business today.

MS. HELWIG: Very good. You've never let us down. Good luck and Godspeed. Customer service, do you have any concerns about this new product?

FROM THE FLOOR: I have some serious concerns about our ability to answer some very complex questions. This is a complicated product, and I expect higher call volume.

MS. HELWIG: I'm sure you can handle it very effectively. Actuarial department, can you build in an extra 2 percent to cover the higher volume of customer service inquiries?

FROM THE FLOOR: Is that in addition to the extra 5 percent cushion we already have?

MS. HELWIG: Yes. Never mind. Marketing, what can you tell me about how this product will be promoted?

FROM THE FLOOR: We're planning a \$180 million ad campaign called, "Don't Get Caught Short," featuring (just listen to this) Martin Short.

MS. HELWIG: Obviously, how the administration process is going to go depends a lot upon whether the company is a follower, whether you're just copying somebody else's product, in which case some administration paths are already going to have been blazed out there. You will be able to go to industry meetings and tap the brains of some of the other people that are in this market. You might be able to hire a third-party administrator (TPA) that has some experience in it, a consultant, etc. But if you're an innovator developing a HICUP product, and nothing else like it

is out there, your reaction might be a little bit different depending upon whether somebody's just thrown the idea at you and you really have to work out all of the details of it, versus whether you've had a Brad Marketeer who's brought it to you in a very rigorous process and has thought through many of the issues.

But, generally speaking, I think there are some key lessons to keep in mind are. First of all, involve everybody. Make sure that you get them involved early on, try not to forget anybody because, if you do, ultimately it will come back at you. Secondly, I think you get a lot of true diversity of thought if you get everybody involved. Your HR area or your underwriting area is going to think of something or of some concerns or issues that nobody else has thought of. It also is a great way to get everybody communicating and get some ideas out there.

As I think our example tried to represent, you can expect over-commitment from some groups that will be convinced that they're going to be able to have this done by tomorrow, and it should not be a problem. Once they get into it, they're going to run into all sorts of thorns. But most likely your data processing department is going to tell you it can't be done for two years. So, you're going to get the whole range of commitment there. As we said, not only should you try to involve everybody, but you should try to involve them early on.

Have you ever been in a situation where you get into the product development process, find out you've forgotten somebody, and for some reason that particular department is very uncooperative once they find out about it? If they had been involved from day one, they might have been willing or able to work through it and be a little more cooperative, but the resentment can build up if somebody is not brought in at the ground floor. It also can give you some advance warning if you do have a department that's very backed up as to what the lead time is going to be for them to get it done.

You can, in an insurance company, definitely leverage the relationships that exist between the various departments in order to get your goals accomplished. Different people react differently to different stimuli. If you know the people in your company, the types of things that they react to can be focused on or concentrated on as you go through the development process.

I'm going to take the different administrative areas one at a time. On the systems side, one of the key things that is often not thought about until the end is whether systems can support the sales of the product. Can they create a quote system? Can they build it so that it can pay commissions? I was involved with one long-term-care product line where they got to the end and discovered that the system couldn't support all the different commission hierarchies that they had contracted on with the brokers. That's a major issue that should have been thought of upfront. Can the systems support the claims processing? I hate to seem one-sided here, but because much of my background is in long-term care, there definitely have been issues on the long-term-care side with companies realizing after the fact that their claims

systems were not appropriate and not adequate for long-term care. They did not capture all of the information that was going to be needed. And then what do you do with the systems? Do you go back and retrofit the ones that you have? Do you redesign? Do you contract out?

The underwriting, the eligibility issues and the billing systems are all things the systems area has to think through at the beginning. There should also be some kind of implementation dry run before the thing actually goes live, so that when those first applications come in the door, the company's ready for them.

On the customer service side, as our example points out, this is a unique product. There's going to be a lot of training. It's going to be complicated. It's going to be totally different than anything else the company has been doing. If the customer service area doesn't understand the product, they're not going to be able to answer questions. So, they're going to need a significant amount of training. The customer service area may also be one of your early feedback points for how the customers are reacting to this product. Obviously, sales are the first feedback point. Customer service might be the next one. There should be some close contact with them even after the fact to find out what they're hearing from the customers about it. The customer service area might need some additional resources if this is complex or might need to have some special benefit calculators or claim calculators developed for them so that they can answer these questions.

Legal is next. As has been pointed out to us in this particular example, that's going to be a major hurdle that has not been considered, but for almost any product there are going to be different state requirements. Some states are going to allow a particular benefit or a particular type of policy, and others aren't. That all needs to be understood before you go into it so that you don't have a brokerage system or sales force lined up in a particular state and then find out that they don't even allow this type of product. The rate and form filings all get very complex.

In this particular example, the underwriting is going to be new and different because we're going to have to link morbidity and mortality risks together. There needs to be some significant thought in terms of the balancing of how much the underwriting processes are going to cost versus how much morbidity savings you're going to get from the information that you learn. The applications, the underwriting tools and resources will all need to be developed.

The likelihood of getting the product approved will vary state by state. Some states require home state approval before they'll approve. So, it seems key to get the state of domicile involved in the discussions early on, particularly if it's a new type of product. In particular, if there are some states where the company does a significant amount of business, such as Florida or New York—they're also difficult states from regulatory standpoint—it would be advantageous to get them involved and find out what their reactions are going to be before you get too far into it.

On the distribution side, there's going to have to be a lot of discussion with the marketing areas. As we actuaries know, there's a lot of back and forth as you work through what the pricing can accommodate, what you really can afford, and the balance between the commission structure and the premium. There has to be some thought given to how much time it will take the agent to sell this. What's the premium? Is it going to be worth it for them to sell it for a 10 percent commission? If the premium is \$100, it is definitely not worth it. If the premium is a couple thousand, maybe it would be. But the amount of time it takes them and the amount of effort that they have to put into it, compared to that compensation, is something the administration area or the company needs to think about before they go into it.

There's going to be generally a lot of time in the home office developing the marketing materials, training materials and outlines of coverage. How you're going to go about getting the word out and advertising it all needs to be thought through, too.

Lastly, you're going to need to develop evaluation tools that can be used as the product progresses where you do some focus groups and understand how the customers understand and relate to this product. Reporting needs to be developed to monitor the sales and the results, and to make sure that it is fitting within your profit targets and goals. You need to try to evaluate whether it is working or not.

To make it go more smoothly, obviously you need to get all your internal resources involved and, as we said earlier, get them involved up front. You could judiciously use some external resources. Of course, I'm a big proponent of using consulting actuaries, but you can also consult out with legal and with compliance firms. As I think we alluded to, if you have a major data processing issue and it's going to necessitate revamping your entire system to support the product, you might need to look into contracting out with a TPA or buying an administration system that will support it.

You definitely need to do some test marketing. Rolling it out and seeing what happens (even rolling it state by state or rolling it all at once) is, generally speaking, not the best way to find out if the thing is going to work. As actuaries, we have to regularly look at what the return on the product is and question or advocate whether the product should move forward based on whether it's going to fall within the company's goals on return on investment (ROI).

Rome wasn't built in a day, but it was built. It did eventually get done. That's a difficult lesson, I think, for everybody who's getting into new products—the time frame has to suffer in order to get it done right, but if the time frames are going to suffer, there has to be a constant feedback to the chief operating officer and management on what the delays are and what the issues are that are coming up.

MR. VOLKMAR: We're now going to change gears here, and we are going to become the actuarial department for this highly creative company that we're working for.

You are the actuarial department. You sat through Mr. Marketeer's sales meeting. You sat through the administrative meeting. You have had your side conversations within actuarial and with other non-sales areas complaining about the ill-conceived, probably illegal product they've come up with and how you wish you had a job where you could just throw up ideas and walk away, leaving others to work through all the mess and the details. You've sat through all this, and if you've ever worked through this process, maybe it wasn't this way when it started, but after you got into it, it really did start to make you think. You know this product has a lot of issues in real life, but, still, if you've ever worked through the process, working through the product description and the details really makes you think about, from the actuarial side, how would I do this?

You are the product actuary for Company XYZ, considering the development and pricing of a unique new product—the description we looked at earlier. Please do the following:

- 1) Outline all key issues associated with the development and pricing of this product.
- 2) Prioritize these issues.
- 3) Outline plans to resolve these issues.

That's what we're going to try to do this morning, at least in some limited format.

I will call the meeting to order. I'm assuming that you've all read through the materials that have been distributed at this point and discussed. Here's my perspective from my senior management position within the actuarial area. I believe that the more actuaries, the better. We all see different perspectives. We all have worked on different product lines. We've all had different experiences and so on and so forth. What I'm going to do is open it up to the floor and basically get you to tell me what you think all of the issues are so that I can take your ideas, summarize them, present them to everybody and take full credit for them.

If you're the actuary, you have to live with this product. Let's pretend for a moment that the product is legal. What are the issues that you see from where you're sitting?

MR. SANDY HERMAN: You have all these freestanding products where you presumably have experience on mortality and morbidity. Where do you expect the mortality and morbidity to come in on this combined product, given the underwriting standards put into place?

MR. VOLKMAR: That's a very good question.

FROM THE FLOOR: This looks like a very expensive product, given that you're combining several products together. I was wondering how the marketplace will see that. Have you gone out and seen what the potential marketplace is, given the high price compared to the other products out there?

MR. VOLKMAR: That's a very good point.

FROM THE FLOOR: Are we supposed to price this on a fully loaded base?

MR. VOLKMAR: How do you mean fully loaded?

FROM THE FLOOR: Marginal expense or fully loaded expense?

FROM THE FLOOR: There's an interesting aspect in terms of future re-rating. You have all the health information. It may, in fact, give you an edge in setting your mortality rate on your UL, say, five, 10 or 15 years down the road, doing additional re-rating.

FROM THE FLOOR: Non-guaranteed elements.

FROM THE FLOOR: It's going to replace the products that you currently have in force. What are you going to do about agents replacing or shifting business, commission issues, potential deferred acquisition cost (DAC) problems, things of that nature? How are we going to price that into our operation?

MR. VOLKMAR: That's a very good question.

FROM THE FLOOR: Getting back to the second comment, I'd like to see the feedback from the market research and the focus groups around price sensitivity and demand for this market—those sorts of issues.

FROM THE FLOOR: To follow up on the replacement question, what do we think is going to happen to the experience under the existing products?

MR. VOLKMAR: Good question.

FROM THE FLOOR: On the property and casualty (P&C) side, the large multiline companies will offer wrappers and discounts. I know that our marketing guy said we don't want a discount, but if you came back and said this is going to cost us \$5 million to implement this way versus \$500,000 to implement it that way, I think we ought to offer that option.

MR. VOLKMAR: I actually worked for a company once that spent \$7 million to develop price, implement a product, and there were seven policies sold. So we called it the million-dollar policy.

FROM THE FLOOR: I was going to ask about the renewability assumptions that were being made.

MR. LINDER: You'd want to have a guaranteed renewability in that product.

FROM THE FLOOR: Have we figured out what the risk-based capital (RBC) requirements are for this product? And what is the company's capitalization going to be? How are we going to deal with the analysts as far as public disclosure and so on?

MR. VOLKMAR: Good question. One of my first questions when I saw the product design was how in the world do you reserve for this?

FROM THE FLOOR: —Is it at least the minimal sum of the parts?

MR. VOLKMAR: Yes.

FROM THE FLOOR: Since you've included medical, what are, if any, the Omnibus Budget Reconciliation Act (OBRA) and Health Insurance Portability and Accountability Act of 1996 (HIPAA) requirements with respect to the nonmedical piece of this contract?

FROM THE FLOOR: Are you going to use attained age or some kind of entry age, single versus five-year brackets, things of that nature?

FROM THE FLOOR: Small group?

MR. VOLKMAR: Yes, that was another thing that came up when I was reading through, because I do a lot of small group medical. We use the words "group" and "medical" on totally different pages of the presentation. What does that really mean?

Obviously, this product is not going to exist in real life, but the process that we've talked about thus far and that we'll go through for the rest of the session is really the thought process with the approach and how to go about it.

FROM THE FLOOR: What are your premium tax assumptions?

MS. HELWIG: Have we been given profit goals? Are we supposed to be going for a certain ROI? Certain pretax profit? Posttax profit? Do we know what we're supposed to shoot for?

FROM THE FLOOR: You're combining a health product and a life product. So, the first thing is how often is this going to be renewable? Is it annual, like for a health product? Also, the way the account value is working might bug me a bit. Do you want the account value to maybe apply to the life side only or to both?

MR. VOLKMAR: Both. Like with a universal product, you have that account value, and that's your pool of money, your bucket of money to work from. I want to be able to have the life pull out from it as well as the health coverages pull out from it.

FROM THE FLOOR: Don't you want something analogous to the mortality charge, like maybe a morbidity charge?

MR. VOLKMAR: Yes.

FROM THE FLOOR: The details of the product design and product issue are pretty general. This needs to be nailed down as to what the specific features will be and what options will be available.

MR. VOLKMAR: In fact, that's absolutely critical in order to determine the obligations and hence the price. That's critical, so you're going to have to have a draft copy from compliance/legal as to those guarantees that are going to be put into that contract.

The thing that I see that's missing from the actuarial portion of the product development process is a very quick but thorough identification of all the issues involved, prioritizing them and seeing how they can be resolved. I've been in situations where the issues are not brought to the table quickly enough. You get way too far down the road, and then all of a sudden you run into something or the issues are brought up, but there's not an effective process in place to prioritize those issues and figure out whether or not you can get good answers to those or answers that would cause you to make a decision one way or the other.

Why don't we talk about the mortality and morbidity? The question was: Where will each part come in with respect to underwriting? The question was, I think, relative to the current products that are out there. Now, you're an actuary. You have to price all this. Our marketer was very careful to pick products and coverages that we already have. Let's just assume for the moment that we already have experience for all these types of coverages, and it's credible. You have the product design in front of you. How do we price that information? We have to be able to put a price on this. If we can't put a price on this for whatever reason, we need to know that. So how would you go about pricing mortality and morbidity for this? What are your open issues?

FROM THE FLOOR: One issue might be if this is going to be partially or primarily a small group product, are you bound by rating range regulations for all of the morbidity and mortality piece?

FROM THE FLOOR: I would wonder whether the experience that you've seen on the individual coverages is consistent with what you would expect once you bundled them all together.

FROM THE FLOOR: If you're selling this as both an individual and a group product, obviously the morbidity and mortality assumptions would be significantly different.

MR. VOLKMAR: Yes, that's a valid point, individual versus group.

FROM THE FLOOR: What is the underwriting wear-off going to be for the different pieces and for the policy as a whole?

MR. VOLKMAR: Okay, we're breaking this down.

FROM THE FLOOR: Is there any sort of covariance between the different coverages that's going to mitigate or exacerbate what's going on?

MR. VOLKMAR: Yes, that's a very good point.

Again, we'll just go through a sample process here. We know this is a big issue in the pricing of products. We know there are other things out there, but let's pretend for the moment these are the five biggest issues. We have to decide from an actuarial standpoint (here we are at our actuarial staff meeting) what we need to resolve our issues. We decide who's going to do it and by when.

For example, what I foresee in this situation, small group rating requirements, is this going to apply? You figure out who your legal resource is, your compliance resource. Who's going to contact that person? Who's going to get it resolved? Put a date on that. One of the things that I've seen is that actuaries are good at a lot of things, but sometimes we are not good at managing projects, so it really comes down to this level of detail.

For experience on individual coverages consistent with bundled coverages, you put a name and a date on that and maybe even talk about how you would resolve that. For example, on this item where you have this experience versus bundled, where would you start to answer that question? You're a company. You've never done it. You have all these individual coverages out there, and now you're going to offer them in a bundle. Where would you start to try to figure out how to answer that question?

FROM THE FLOOR: Since we offer all the products now, I would probably do a search of my own data to see which insureds currently have combinations of these products.

MR. VOLKMAR: Okay, good.

FROM THE FLOOR: I think you need to get the underwriting department involved in it, too, because how they underwrite this thing on a combined basis versus an individual basis could be very different.

MR. VOLKMAR: Yes, that's a good point. Is there anybody else? There are some carriers out there that have done this in different product lines that sell coverages stand-alone and then also sell them as riders. There are a lot of different ways that you should start thinking about all the different data resources that are available to us. Maybe you can't get the exact data that you want, but you can at least get data that would imply what direction things would move or the interrelationships between the different coverages.

The development of an accurate and flexible pricing and projection model is a key item when you're talking about multiple coverages, how they all interact with each other and the selection and anti-selection involved with the different pieces and the decisions that people make over time. We have the morbidity underwriting coverage assumption, coverage changes, expenses, liabilities and reserves. These are all things that you would feed in to whatever you decided to use as your pricing model.

For administrative implementation support, we actuaries get into a mode where we think (I know I have) when I finish the pricing, and I put my actuarial memo and my final pricing documentation together, I'm ready to walk away and go start the next thing. That's not how it works in real life. The implementation support is a key issue for the administration. You could do everything right to that point, then there could be a train wreck because you weren't involved all the way through the process to make sure things were implemented the way you intended.

Filing support could be as little as handing things over. Or, in a product like this, I'm anticipating that you would need to visit state insurance departments. You would need to be very much a part of that whole process.

The next consideration is financial valuation support. If you're doing things right, whatever comes out of your pricing model should feed in to a lot of other things, and that infrastructure should be built in such a way that everything's tied together. Whenever your company does a company projection, gross premium valuations, recoverability, so on and so forth, a lot of this information should all fit together. Obviously the consideration and application of relevant standards and designing and setting up experience monitoring systems are also important.

The actuary has opportunities to help bring a product to market successfully and contribute from a traditional actuarial perspective. Planning ahead to me partly means planning out the process, but also means building the appropriate infrastructure when other things aren't going on. The one thing that does happen in the product world is nothing's on the horizon, then you walk into a meeting just like we acted out earlier, and all of a sudden you're faced with a mountain of work with very little lead time. There should be a constant effort in place to get whatever tools and build whatever infrastructure you're going to need to handle things going forward, and that's how you use the down time. Support decision-making efforts. One of the things that I noticed, especially as a consultant coming in, is many times

the people who are running a project like this don't necessarily know when to include you and when not to. There are some situations I've been in where people thought they didn't need the actuaries in a particular meeting, and it had a huge impact with the changes they were talking about making. You have to keep your eyes and ears open and support any decision-making efforts to the extent that you can. Put it all together and keep it there.

I worked in one environment where they used to call us the police of the product development process, even though we didn't run the projects and you couldn't really act this way. Our education, training and what we need to know to be able to do our jobs puts us in a unique position to be able to pull a lot of things together and understand how they all impact each other.

The last advice is to communicate. Route summaries of everything you're doing all the time. You go to a meeting. You leave. You summarize it and send it to everybody. This is what I heard. You get feedback, and on a regular basis you send out status reports. You open the lines of communication. You cannot over-communicate. How many times have you gone three-quarters of the way down the road and something was missed because there wasn't a communication in place?

Contribute from a broader perspective. Sometimes people want to put us in a box, and, again, I think we have the opportunity to contribute on a broader basis than that. Understand the definition of "successfully." I don't know if you realize this, but blocks continuously deteriorate. If you walk away from your desk today, and everybody stops selling, everybody stops doing this and that, your company starts going. Blocks of business start declining. Loss ratios start climbing. You have to continuously work to grow. There's a fundamental business tenet there, and we, as actuaries, need to understand that. The answer cannot always be to do nothing. We can't be the impediment for projects going forward. And it really does have to sell. At the end of the day, what we have to do has to be something that works on the street.

Get the big picture. I got to the end of this process, and I talked to somebody who had headed up a product implementation committee for two or three different carriers. I asked him what the biggest issues were that he saw from an actuarial perspective. He's not an actuary. The two biggest issues both had to do with getting the big picture. One of them is understanding how all the operational areas fit together and their jobs and their roles, and how what they do or don't do impacts the prices that you put on things. The second was understanding the compliance side, the legal side. He said more often than not, even today, when he's going through a product development process, there are different state requirements in 15 of the 42 states they're in. He said the actuary never seems to know that up front, and it was one thing that he threw out as something to think about.

Project it forward. I think we know where a lot of the pieces fit together. Projecting it forward to me means if somebody in customer service or underwriting wants to make some change, you can be the one to say that you think this is going to impact X, Y and Z. Focus on finding solutions, not just identifying problems, and be cooperative or you'll hurt yourself and the process.

Key product actuary mistakes include not seeing the big picture, not running a tight project, not resolving issues quickly enough, not communicating clearly or enough and not reconciling results to the market. If you ever find yourself saying, "This is just what my model says," you've lost. You have to understand what you've come up with and how it relates to the market and why. You can't just identify faults; you must also find solutions.

MS. HELWIG: The amount of time that we spent in this session on monitoring, testing and developing reporting systems, etc., is by no means anywhere close to proportional to the amount of time you should spend in real life, but that has to be the end result of all of this. We talked about the possibility of having a six-month-later follow-up meeting in terms of what had happened to this product and maybe having that \$7 million/seven policy sort of scenario.

Post-implementation follow-up is incredibly important. Was the project scope defined adequately or did it creep up on you the farther you got into it? Did you discover more that needed to be done? Were the deliverables clearly defined? The big mistake that I think we've all seen various people make (and have probably been party to making) is that nobody defined exactly what the deliverables of this product were and when everything was going to be done and by whom. Are the goals clear, objective and realistic? And are they in a format that you can measure results against? Or are they just formatted to sell a ton of this product? They have to be something that you can measure against later. Are there mileposts that are established for the project as you go along so that you know at each point exactly what the things are that you're measuring against?

Unfortunately, the post-implementation follow-up is often missed. It has to be considered up front. As you're doing the development of the product, the goals and the monitoring process have to be considered so that you can learn from past mistakes and develop better approaches going forward.

I think, and probably most people in this room would agree, that the actuarial department is the key area for doing much of this program monitoring and follow-up. We have to be careful that we clearly define all of the data needs that are part of the types of things that we're going to insist on being collected in the data area so that we can do the proper follow-up. We then have to develop set-up methods, methods to collect that data, to make sure that it's getting done, and then set up the reporting systems.

One of the important things that I think actuaries forget about is developing that feedback loop once we have the data. How often do you find a company or have you worked in a situation where nobody knows what the lapse rates are? You dig around and find an actuary does happen to have it sitting on an Excel spreadsheet in his office, but it was never shared with anybody. There has to be that feedback loop.